

draft

general management plan / environmental assessment

land protection plan

wilderness suitability review

march 1985

KATMAI

NATIONAL PARK AND PRESERVE / ALASKA



Comments will be accepted until **JUL 8 1985**
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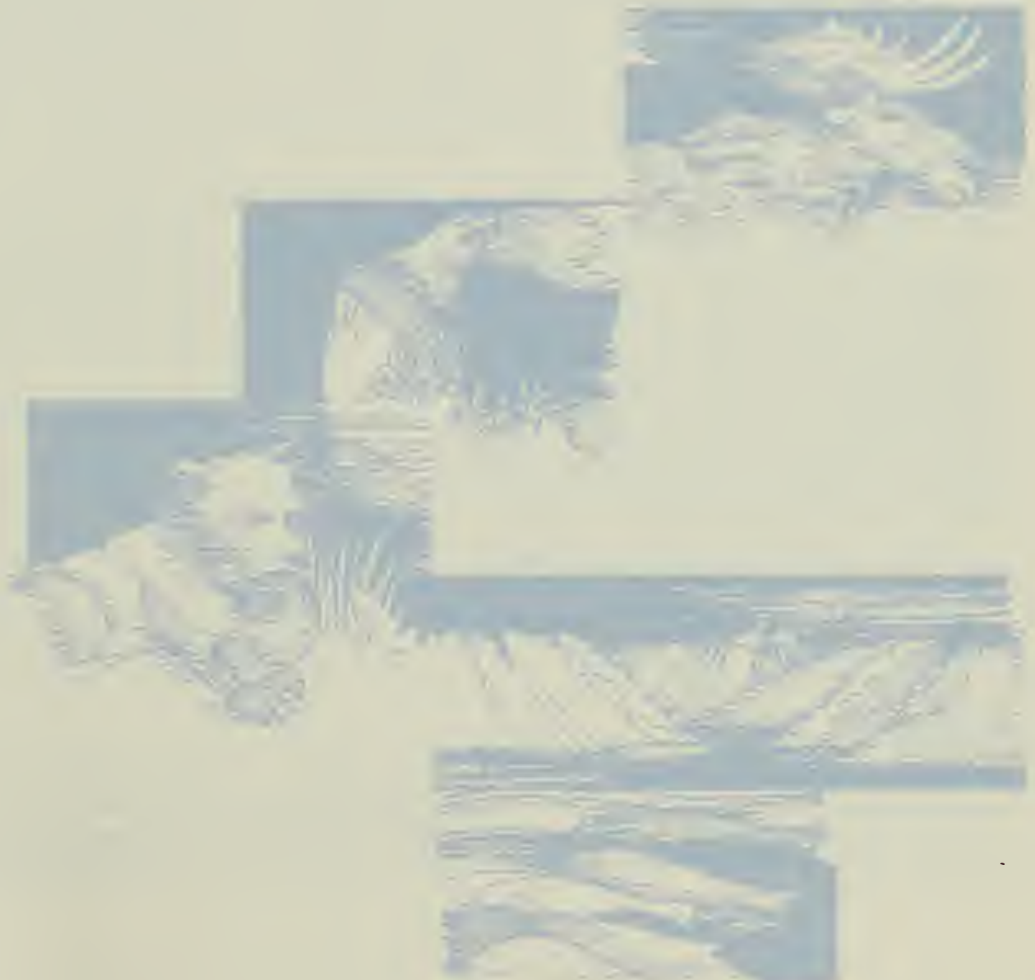
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Draft
General Management Plan / Environmental Assessment
Land Protection Plan
Wilderness Suitability Review

**Katmai National Park and Preserve
Alaska**

U.S. Department of the Interior / National Park Service



ANILCA REQUIREMENTS

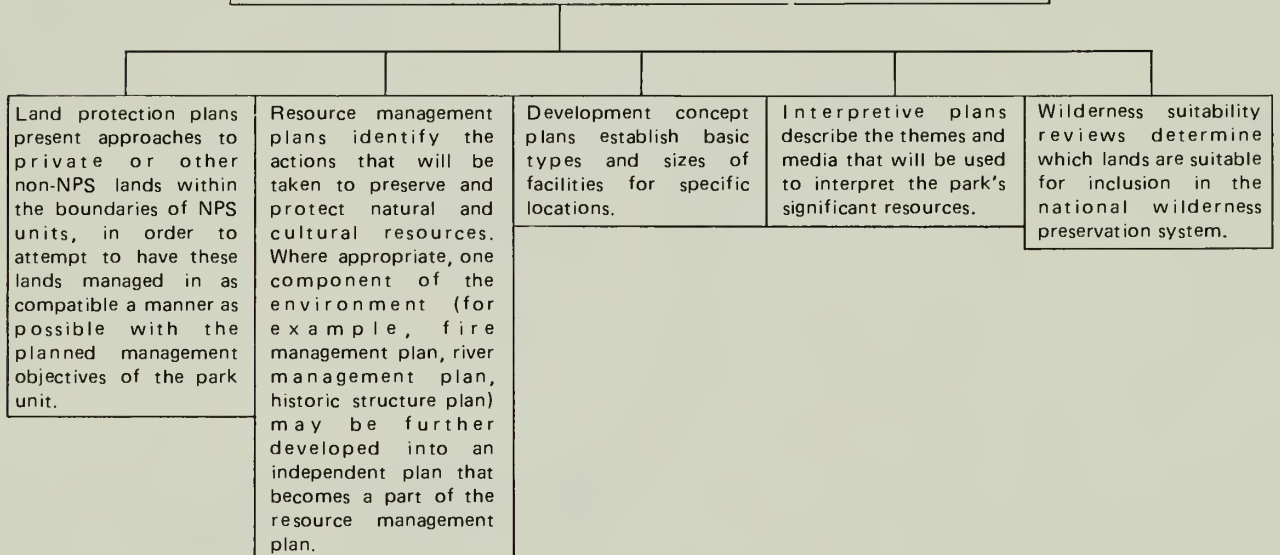
Section 1301 of the Alaska National Interest Lands Conservation Act (ANILCA: PL 96-487) requires the preparation of conservation and management plans for each unit of the national park system established or enlarged by ANILCA. These plans are to describe programs and methods for managing resources, proposed development for visitor services and facilities, proposed access and circulation routes and transportation facilities, programs and methods for protecting the culture of local residents, plans for acquiring land or modifying boundaries, methods for ensuring that uses of private lands are compatible with the purposes of the unit, and opportunities for mutually beneficial cooperation with other regional landowners.



NPS PLANNING DOCUMENTS

The National Park Service planning process for each park (preserve, monument, or other unit of the system) involves a number of stages, progressing from the formulation of broad objectives, through decisions about what general management direction should be followed to achieve the objectives, to formulation of detailed actions for implementing specific components of the general management plan.

The general management plan addresses topics of resource management, visitor use, park operations, and development in general terms. The goal of this plan is to establish a consensus among the National Park Service and interested agencies, groups, and individuals about the types and levels of visitor use, development, and resource protection that will occur. These decisions are based on the purpose of the park, its significant values, the activities occurring there now, and the resolution of any major issues surrounding possible land use conflicts within and adjacent to the park. The following kinds of detailed action plans are prepared concurrently with or after completion of the general management plan.



Depending largely on the complexity of individual planning efforts, action plans may or may not be prepared simultaneously with the general management plan. If they are prepared after the general plan, the NPS public involvement and cooperative planning efforts are continued until all of the implementation plans are completed.

SUMMARY

Katmai National Park and Preserve encompasses approximately 4 million acres of public land at the head of the Alaska Peninsula. Katmai National Monument was established in 1918 and expanded to the size of the present park in 1978. In 1980, the Alaska National Interest Lands Conservation Act (ANILCA) changed the designation of most of the national monument to park and designated an additional 308,000 acres as a national preserve. The upper 63 miles of the Alagnak River, which starts within the park complex and has been designated as a wild river, is also under NPS administration.

PROPOSED GENERAL MANAGEMENT PLAN

The proposed plan will, for the immediate future, stabilize activities associated with Brooks Camp. The improvements required by the concession contract will be completed, but the number of guest facilities will remain at the current level. Because of the concentration of bears in the immediate vicinity of Brooks Camp, however, long-range plans call for the phased relocation of all facilities. Studies will be conducted to evaluate alternative sites in the spruce forest near the road to the Valley of Ten Thousand Smokes. Projected increases in visitor use will be accommodated at other locations in the park and preserve.

To diversify recreational use, the Park Service will provide opportunities for wilderness canoeing excursions, float trips, tundra trekking, scenic viewing, and wildlife observation in the central part of the park. Sportfishing, river trips, and hunting in the preserve will continue.

To support these activities, primitive camping areas will be developed at Grosvenor Camp and near Bay of Islands. Grosvenor Camp will be used as a staging area for scenic boat trips and fishing excursions up Coville Lake, and Bay of Islands will be used as a staging area for wilderness canoe trips or as a destination for canoeists and anglers in the immediate area. Primitive camping areas will also be established at the outlet of Nonvianuk Lake and on the road to the Valley of Ten Thousand Smokes at the point where Yori Pass is most accessible. If needed, a camping area will also be established at the outlet of Kukaklek Lake. Lake Camp will continue to be a focus for local day use, parking, and picnicking. Boat launching and docking facilities will be improved. A nature trail and picnic shelters will be provided. Private lodges in and near the park may increase their capacities, in keeping with site and resource constraints.

Seasonal ranger operations will be maintained at Brooks Camp, Lake Camp, and Nonvianuk Lake. Seasonal ranger camps will be established at Bay of Islands, Grosvenor Camp, Battle Lake Camp, Geographic Harbor, Kukak Bay, and Big River. Park headquarters will continue to be located at King Salmon.

The land protection section of the "General Management Plan" identifies the minimum interests in nonfederal lands within the park/preserve boundary needed by the Park Service to protect public lands and uses, and it assigns priorities for acquiring interests in each of these tracts. The highest protection priorities are the fee acquisition of approximately 75,300 acres of state lands through a land exchange, 120 acres at Brooks Camp if this land is conveyed to the claimant, three mining claims, and three parcels of Russian Orthodox Church property.

With the passage of ANILCA in 1980, approximately 3.4 million acres of Katmai National Park and Preserve were designated as wilderness. Of the remaining lands within the park boundary, 528,000 acres are suitable to be designated as wilderness. 109,500 acres are not suitable for wilderness, and 31,000 acres are pending suitability determination as land status is resolved.

The Alagnak Wild River will be managed under the same policies as Katmai National Park and Preserve. The Park Service will provide information to visitors regarding camping areas and the location of private lands.

ENVIRONMENTAL ASSESSMENT

Two alternatives were considered besides the proposed plan--alternative A, which would maintain existing conditions and facilities, and alternative C, which would provide overnight cruise boats on Naknek Lake in place of Brooks and Grosvenor camps. For the purposes of assessing environmental consequences, the proposed plan is denoted as alternative B.

Visitor opportunities would be expanded under either alternative B or C. Activities would be diversified, and backcountry opportunities would be moderately expanded. There would be a reduction in bear/human conflicts as a result of relocating Brooks Camp under alternative B. The relocation of Brooks Camp would have significant long-term costs. In alternative C, a substantial investment would be made for a cruise boat operation, with a relatively long payback period because of the short operating season. The effects of the proposed plan or the alternatives on natural resources would be minor. Cultural resources would not be adversely affected under any of the alternatives.

CONTENTS

INTRODUCTION	1
Significance of the Park and Preserve	3
Legislative Purpose	5
Planning Issues and Management Concerns	7

PART ONE: PROPOSED GENERAL MANAGEMENT PLAN

MANAGEMENT ZONING	15
VISITOR USE AND GENERAL DEVELOPMENT	16
Access and Circulation	16
Visitor Use	23
Brooks Camp	23
Other Activity Areas	24
Carrying Capacity	28
Park Operations	28
Development Concept Plans	29
King Salmon	30
Brooks Camp and Grosvenor Camp	30
NATURAL RESOURCE MANAGEMENT	32
CULTURAL RESOURCE MANAGEMENT	36
Archeological Resources	36
Historic Structures	37
Contemporary Native American Concerns	37
LAND PROTECTION PLAN	38
Summary	38
Introduction	39
Purpose of the Park and Resources to be Protected	40
Landownership and Uses	42
Land Protection Alternatives	48
Recommendations	57
NEPA Compliance Considerations	64
WILDERNESS SUITABILITY REVIEW	65
Wilderness Suitability	67
Suitability Determination	71
ALAGNAK RIVER MANAGEMENT	72

PART TWO: THE ENVIRONMENT

NATURAL ENVIRONMENT	75
Geology	75
Mineral Resources	75
Soils	76
Water Resources	76
Air Quality	77
Climate	77
Vegetation	77
Fish	78
Wildlife	79
Endangered or Threatened Species	80

CULTURAL ENVIRONMENT	85
Archeology and Ethnography	85
History	86
Significant Resources	89

VISITOR ACCESS AND USE	91
Access	91
Recreational Activities	91
Visitor Use Trends	92
Existing Facilities	94

PART THREE: ENVIRONMENTAL ASSESSMENT

ALTERNATIVES CONSIDERED	97
Alternative A--Continuation of Existing Conditions	97
Alternative B--Diversified Opportunities (Proposed Plan)	97
Alternative C--A Wilderness Adventure Cruise	99

ENVIRONMENTAL CONSEQUENCES	101
Effects on Large Mammals	101
Effects on Birds	105
Effects on Fish	106
Effects on Vegetation	107
Effects on Water Quality	109
Effects on Air Quality	110
Effects on Wilderness Values	110
Effects on Visitor Use and Services	111
Effects on Concessioner and Private Enterprise	113
Effects on Cultural Resources	114
Effects on the Local Economy	114

COMPLIANCE	118
------------	-----

CONSULTATION AND COORDINATION	119
Public Involvement	119
Cultural Resource Consultations	120

APPENDIXES

A:	Final Rules on Public Uses of National Park System Units in Alaska (36 CFR 13)	123
B:	Management Objectives	133
C:	ANILCA, Section 1301 (Management Plans) and Section 1302 (Land Acquisition Authority)	135
D:	Master Memorandum of Understanding between the Alaska Department of Fish and Game and the National Park Service	139
E:	Cost Estimates	144
F:	Federal Consistency with Alaska Coastal Zone Management Policies	147
G:	ANILCA, Section 810 Subsistence Evaluation	152

REFERENCES CITED	156
------------------	-----


PLANNING TEAM	158
---------------	-----

MAPS

Location	4
Region	6
Park Features	9
Management Zones	17
General Development--Preferred Alternative	21
Brooks River Area	25
Land Status and Protection Priorities	43
Wilderness Suitability	69
Wildlife Habitat	81
Large Mammal Habitat	83
Cultural Resources	87

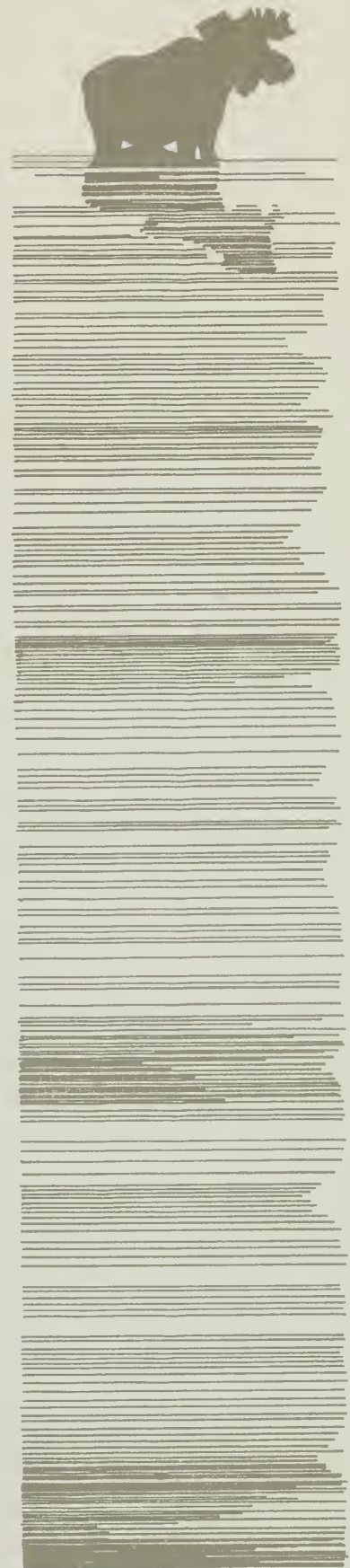
TABLES

1.	Modes of Access Allowed for Subsistence and Recreational Activities	19
2.	General Access Provisions	20
3.	Summary of Proposed Development Actions	31
4.	Current Landownership	42
5.	Summary of Environmental Consequences	116



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Katmai National Park and Preserve, encompassing over 4 million acres of public land, is located approximately 290 air miles southwest of Anchorage and at the beginning of the Alaska Peninsula. Access is principally by aircraft because there are no highway connections with any sizable population centers. The only road access to the park starts at the community of King Salmon and ends at Lake Camp, just inside the western boundary, a distance of approximately 10 miles.

INTRODUCTION

SIGNIFICANCE OF THE PARK AND PRESERVE

Katmai was initially established to preserve the features associated with one of the most powerful volcanic explosions ever recorded. On the afternoon of June 6, 1912, there was a thunderous blast as an immense column of smoke billowed from what was later named Novarupta Volcano, and 7 cubic miles of incandescent ash and pumice were rained over a wide area. The 30-square-mile Ukak River valley was buried by as much as 700 feet of hot ash that literally flowed from the volcano, turning the river valley into a hellish plain where countless fumaroles emitted volcanic gasses and vaporized the river and rainwater. Although the ash has now cooled and virtually no fumaroles are steaming, the Valley of Ten Thousand Smokes remains the major scenic attraction for park visitors. The 2½- by 12-mile area--richly colored in shades of yellow, red, and tan, and dissected by river channels up to 100 feet deep but only 5 to 10 feet wide--is largely devoid of life, yet plants are beginning to gain a foothold in places that are sheltered from the abrasive, wind-driven ash.

After the 1912 eruption, expeditions were organized to study the volcanoes and the Valley of Ten Thousand Smokes. These trips led to preservation initiatives by the National Geographic Society and the eventual establishment of Katmai National Monument in 1918. In the following years portions of the coastline, the lake system, and important wildlife habitats--all nationally significant resources adjacent to the volcanic features--were added to the monument. In 1978 Katmai was expanded by presidential proclamation under the authority of the Antiquities Act. With passage of the Alaska National Interest Lands Conservation Act of 1980 (ANILCA), Congress redesignated Katmai as a national park and preserve.

Of the diverse wildlife species that inhabit Katmai, the most conspicuous is the Alaskan brown bear. Although brown bears are distributed throughout southwestern Alaska, Katmai National Park is a sanctuary for the largest unhunted population of coastal brown bears in the world. Concentrations of the bears along streams during the annual salmon-spawning runs provide excellent opportunities for visitors to observe and photograph the bears in their natural environment.

Visitors, as well as bears, are attracted by the abundance and diversity of fish in Katmai's lakes and streams. More than a million salmon return each summer to spawn in the park and preserve. Entire streams turn silver and then red as these fish complete their life cycle. The spawning adult salmon, their eggs, and the juvenile fish that hatch from them form a critical link in the food chain, supporting a variety of bird, mammal, and fish species. It might be said that salmon are a primary force driving the Katmai ecosystem.

Together with the salmon, a number of other freshwater fish are avidly sought by sportfishermen. Trophy-sized rainbow trout attract anglers from all over the world. Arctic char, lake trout, grayling, and northern pike add to the variety of fish that lure sportfishermen. A strongly developed catch-and-release ethic has contributed to perpetuating the high quality of sportfishing in Katmai.



LOCATION

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But Katmai is more than bears, fish, and volcanoes. It is a vast land of rivers, lakes, glaciers, alpine tundra, coastal fjords and bays, marshes, alder thickets, and spruce forest. Each of these environments is inhabited by an interdependent community of birds, mammals, fish, and insects that have adapted to live in Katmai's harsh climate. Above all, Katmai is wilderness, an elusive spirit common to the soaring eagle, the irascible wolverine, and the untamable wind.

LEGISLATIVE PURPOSE

ANILCA identifies the following general purposes for Katmai National Park and Preserve, as well as the other Alaska conservation system units (sec. 101):

to preserve for the benefit, use, education, and inspiration of present and future generations certain lands and waters in the state of Alaska that contain nationally significant natural, scenic, historic, archeological, geological, scientific, wilderness, cultural, recreational, and wildlife values . . .

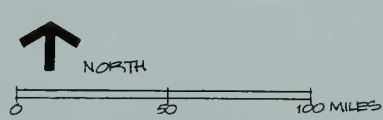
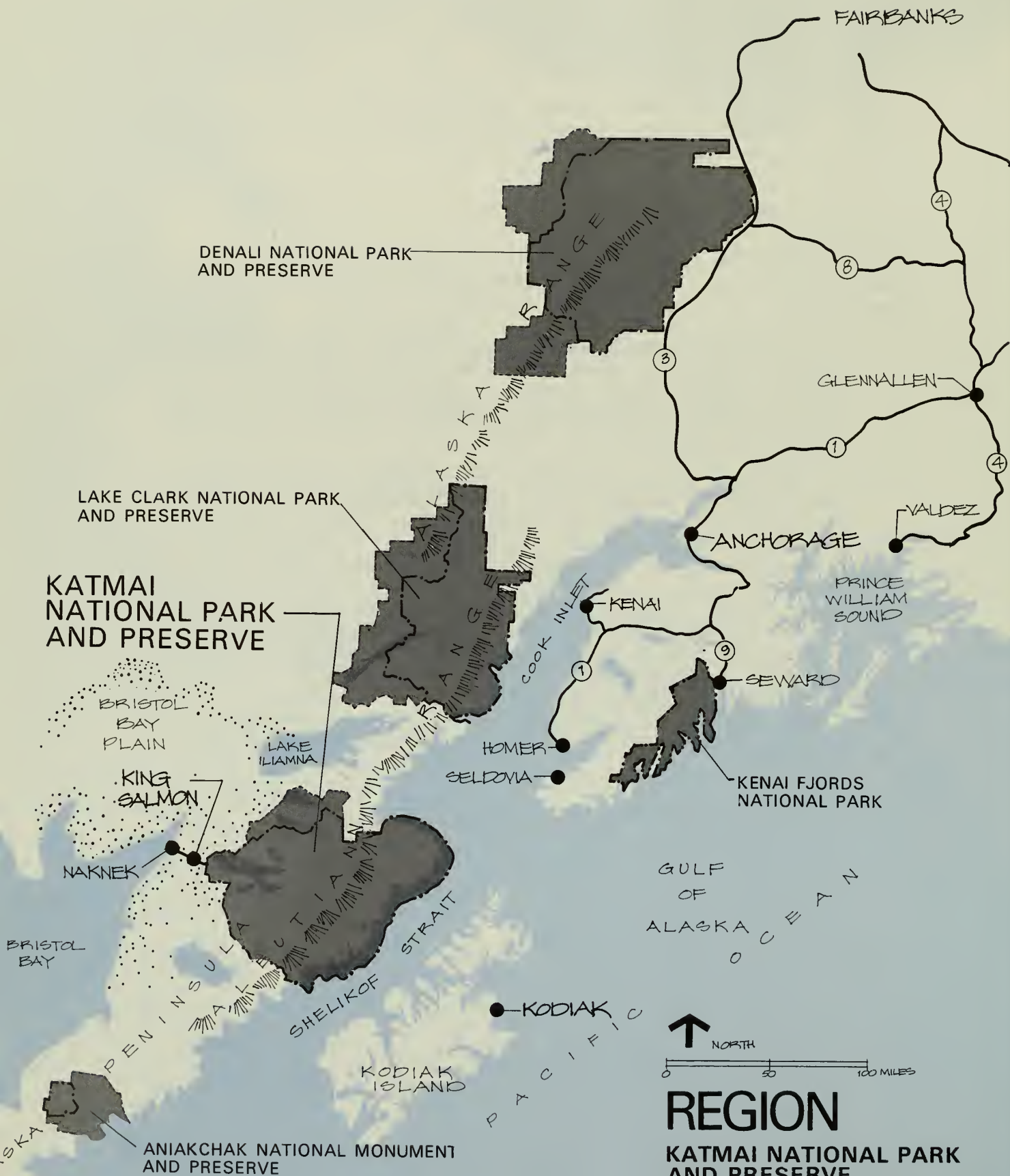
to preserve unrivaled scenic and geological values associated with natural landscapes; to provide for the maintenance of sound populations of, and habitat for, wildlife species . . . including those species dependent on vast, relatively undeveloped areas; to preserve in their natural state extensive unaltered arctic tundra, boreal forest, and coastal rainforest ecosystems; to protect the resources related to subsistence needs; to protect and preserve historic and archeological sites, rivers, and lands, and to preserve wilderness resource values and related recreational opportunities including but not limited to hiking, canoeing, fishing, and sport hunting, within large arctic and subarctic wildlands and on free-flowing rivers; and to maintain opportunities for scientific research and undisturbed ecosystems . . .

consistent with management of fish and wildlife in accordance with recognized scientific principles and the purposes for which each conservation system unit is established, designated, or expanded by or pursuant to this act, to provide the opportunity for rural residents engaged in a subsistence way of life to continue to do so

ANILCA further defines the specific mandate for Katmai as follows:

to protect habitats for, and populations of, fish and wildlife, including, but not limited to, high concentrations of brown/grizzly bears and their denning areas; to maintain unimpaired the water habitat for significant salmon populations; and to protect scenic, geological, cultural, and recreational features

Section 203 of ANILCA directs that Katmai National Park and Preserve be administered as an area of the national park system, pursuant to the



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National Park Service organic act of August 25, 1916, as amended and supplemented, and as appropriate to section 1313 and other applicable provisions of ANILCA. The organic act states in part that

the service . . . shall promote and regulate the use of . . . national parks . . . which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

Subsistence use, sport hunting, and trapping are permitted in the preserve. Management and use of all national park system areas is directed by federal regulations (published in title 36 of the Code of Federal Regulations). These have recently been updated to include regulations specific to Alaska parks (36 CFR 13, reprinted in appendix A). All federal lands and waters within the park and preserve boundary are under the proprietary jurisdiction of the National Park Service. Both federal and state agencies have authority for the enforcement of appropriate regulations.

PLANNING ISSUES AND MANAGEMENT CONCERNS

Although nearly all of Katmai National Park and Preserve is and will continue to be managed as a natural area, certain issues about park management must be addressed:

Visitor Use

Visitors have traditionally come to the Brooks Camp developed area to fish and watch Alaskan brown bears in their natural environment. This development represents an intrusion on prime bear habitat and feeding patterns. The result has been potentially dangerous conflicts between bears and humans in this area. The issue is how to reduce this hazardous situation without harming the bears and to still provide for traditional visitor activities in this portion of the park.

Overnight visitor use at Katmai has increased since 1956 at a rate of approximately 265 stays per year to a total of 8,173 stays in 1984 (including backcountry campers, campground users at Brooks Camp, and guests at four lodges and two primitive camps). The present focus of this use is the Brooks Camp area, which provides the only campground in the park and 55 percent of the available lodge beds. If the 1956-84 trend continues, approximately 12,000 overnight stays can be expected by the year 2000 (an annual increase of 3 percent). The greatest rate of increase over the past 10 years, however, seems to be at the Brooks Camp campground and lodge, with the average annual increase ranging from 175 to 200 stays, respectively. If this 1974-84 rate of increase continues, total overnight use could reach 17,000 by the year 2000 (an annual increase of 7 percent). Assuming that visitor use will continue to increase by up to 7

percent each year, it is necessary to decide where this use should be accommodated without further affecting the wildlife of the park and without allowing the visitor experience to deteriorate because of overcrowding.

Access and Circulation

The primary means of access to the park and preserve for nonlocal visitors is by amphibious aircraft and floatplanes. These planes are small (four to nine passengers) and noisy, thus intruding on the wilderness setting of the park. Additional modes of access must be examined.

Park Operations

The present park staff of seven employees manages both Katmai National Park and Preserve and Aniakchak National Monument and Preserve, a total area of nearly 4.7 million acres. Park headquarters are in King Salmon, and a major summer operation is at Brooks Camp. Seasonal rangers are stationed at Brooks Camp, Lake Camp, the outlet of Nonvianuk Lake, and on the coast at Geographic Harbor. With such a small staff, it is difficult to adequately monitor resource uses to guard against adverse effects or to provide proper visitor services. The park staff must be increased.

Natural Resource Management

Katmai National Park is the home of the largest unhunted population of Alaskan brown bears in the United States. Bear-feeding habits are not fully understood, but it is clear that outside interference, such as the presence of humans, can easily distract bears. Also competition for food sources, particularly salmon, due to sportfishing and subsistence activities can potentially result in stress on the brown bear population. The issue is how to reduce human interference with brown bears, particularly at Brooks Camp.

Katmai provides major spawning areas for salmon, which are important to the economy of the entire Bristol Bay region. Salmon migrating from the sea to spawn in freshwater streams represent a tremendous upstream flow of nutrients that is vital to the integrity of park ecosystems. Salmon at all stages of their lives are a source of high-protein food needed by many fish and wildlife species, and they affect the distribution of predator species. Rainbow trout, which are popular with sportfishermen, are present in salmon streams because they feed on salmon eggs and fry, and brown bears obtain the protein they need to survive and reproduce from salmon. Therefore, it is important to understand the natural ecological balance and how human activities, such as sportfishing, may disrupt that balance. In addition the number of salmon allowed to migrate upstream (the escapement) is established by the Alaska Department of Fish and Game. If, in fact, human uses are detrimental to the

PRESERV

HUNTING PERMITTED
POTENTIAL FOR EXP
RECREATIONAL ACT



- ||||| BEAR CONCENTRATION AREA
- OPEN TUNDRA HIGHLANDS
- PRESERVE BOUNDARY
- PARK BOUNDARY
- ALAGNAK RIVER BOUNDARY



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PARK FEATURES

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- BEAR CONCENTRATION AREA
- OPEN TUNDRA HIGHLANDS
- PRESERVE BOUNDARY
- PARK BOUNDARY
- ALAGNAK RIVER BOUNDARY

↑ NORTH

0 5 10 15 MILES
0 5 10 15 20 KILOMETERS

PARK FEATURES

KATMAI NATIONAL PARK AND PRESERVE
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ecological balance, then steps must be taken to maintain natural and healthy populations of fish and wildlife species.

Land Protection

Katmai National Park and Preserve and the Alagnak Wild River contain 4,119,166 acres. Of this total, all but 109,486 acres are federally owned. The majority of nonfederal lands are owned by the state (75,300 acres, including some 25,400 acres outside the boundary), and native regional and village corporations have applied for or have received patents for approximately 50,900 acres (including overlapping applications). The National Park Service must identify which lands or interests in land need to be in federal ownership to achieve management purposes, and it must address cost-effective alternatives to direct federal purchase to meet management objectives.

Wilderness Suitability

ANILCA formally designated nearly 3.4 million acres of Katmai National Park and Preserve as wilderness, to be managed under the provisions of the 1964 Wilderness Act. It is necessary for the National Park Service to determine the suitability of all lands within the park complex for official designation as wilderness, with allowances for lands needed for visitor use, park operations, and roads.

The proposed plan addresses these issues and concerns. It recommends visitor opportunities that are in keeping with the mandate of the National Park Service to provide for visitor use and at the same time to preserve significant natural resources. The plan is based on management objectives developed by the park staff (see appendix B), and it constitutes a comprehensive management plan, as required by ANILCA (see appendix C).

Once the proposed plan has been reviewed by the general public, and by federal and state governmental agencies, it will be revised as needed. The final plan, when approved, will be used to guide park management for the next five to 10 years, in conjunction with other policies and regulations governing park management (see appendix A).

The proposed plan is described in the first part of this document, and it includes the park and preserve's "Land Protection Plan" and the "Wilderness Suitability Review." The second part is a general description of the park and preserve, and the final part discusses the alternatives that were considered for visitor use and the environmental consequences.



PROPOSED GENERAL MANAGEMENT PLAN

MANAGEMENT ZONING

Lands within Katmai National Park and Preserve will be zoned to identify a particular management emphasis for specific areas. Management zoning is therefore the basis for planning decisions on park use and development. The plan proposes three zones--the natural zone, the park development zone, and the special use zone (see Management Zones map). Because almost 3.4 million acres of Katmai were formally designated as wilderness by ANILCA, and because much of the remaining acreage is in a natural, undeveloped state, the majority of the park complex will be managed as a natural zone. Those areas with existing development or where facilities are proposed by this plan will be classified as the park development zone. All lands not owned by the federal government will be classified in the special use zone. The management emphasis of each zone is described below.

Natural Zone (96 percent of the park and preserve)--Lands and waters in this zone will be managed to ensure that natural resources and processes remain largely unaltered by human activity. Those areas designated as wilderness and those areas determined suitable for eventual designation as wilderness will be part of this zone (see the discussion of wilderness suitability in the "Land Protection Plan"). Only those uses that do not adversely affect natural processes are appropriate within this zone. Trails may be established where they would contribute to resource protection or visitor safety.

Park Development Zone (less than 1 percent of the park and preserve)--Lands in this zone will be managed to accommodate intensive use resulting from the presence of developed campgrounds, with food caches and pit toilets, and overnight lodge facilities (at Brooks and Grosvenor camps). Ranger patrol cabins, camping shelters, and other structures to serve visitor and resource protection needs will also be included in this zone.

Special Use Zone (3 percent of the park and preserve)--Lands in this zone will be used or managed by agencies or interests other than the National Park Service. (NPS administrative control in this zone is either lacking or secondary to other interests.) In Katmai this zone will include all nonfederal lands, such as private properties. The size of this zone could diminish if certain native application lands are not conveyed or if certain state or private lands are acquired by the National Park Service. These lands would then be designated as part of the natural zone and managed to ensure that natural resources and processes remain largely unaltered by human activity.

VISITOR USE AND GENERAL DEVELOPMENT

The management philosophy for Katmai National Park and Preserve under the proposed plan will be to ensure the preservation of the park's extraordinary wilderness values. Although the proposed plan focuses on ways to diversify recreational use at Katmai, the vast majority of the park/preserve complex will remain pristine. Out of approximately 4 million acres total, a maximum of only 30 additional acres will be used for facility development. The proposed plan will not be implemented as a single action, rather it will occur in several locations and be phased over a period of five to 10 years. Many of the actions will not be undertaken unless the demand for additional facilities has been clearly established.

Generally, the proposed plan will reinforce traditional patterns of use. Although Katmai's first visitors were interested primarily in the volcanic activity of Novarupta and Mount Katmai since the 1950s visitors have begun to appreciate other aspects of Katmai. When fishing camps were introduced in the 1950s, sportfishing became a major attraction. The construction of a road to the Valley of Ten Thousand Smokes in 1962-63, coupled with scheduled jet airline service from Anchorage to King Salmon, ushered in the present era of sight-seeing tours to the valley. Brooks Camp on the shore of Naknek Lake has become the focal point for scenic tours and wildlife observation as well as for sportfishing. Improved access has also led to a rise in hiking and backcountry use. More recently campground use has increased. The proposed plan has been developed to continue these activities and to suggest additional opportunities. Proposed development actions are summarized in table 3 at the end of this section.





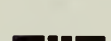

ACCESS AND CIRCULATION

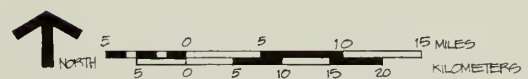
The proposed plan for Katmai National Park and Preserve relies on traditional modes of access for visitor use (see tables 1 and 2). Commercial air transportation will continue to be the primary means of access to developed areas within the park/preserve complex. Efforts will be made, when possible, to reduce aircraft noise at Brooks Camp.

The increase in visitor activity at Brooks Camp relative to other areas of the park and preserve has been made easier because of scheduled flights to Brooks Camp by amphibious aircraft that connect with jet service to King Salmon. For people without access to private or lodge aircraft, visiting other areas of the park and preserve has necessitated that they charter aircraft. The redistribution of visitor use proposed by this plan will be more easily accomplished if noncharter scheduled aircraft service or some other means of convenient access is developed.

As visitation increases, other means of commercial access will be examined to determine if they are feasible. Commercial transportation could be established from King Salmon to Brooks Camp and from Lake Camp to Brooks Camp, wilderness drop-off points on Naknek Lake (for example, Bay of Islands and the mouth of Ukak River), or other destinations. Any new service should support more diversified and dispersed activities.



-  NATURAL ZONE
-  SPECIAL USE ZONE
-  PARK DEVELOPMENT ZONE
-  PRESERVE BOUNDARY
-  PARK BOUNDARY
-  ALAGNAK RIVER BOUNDARY



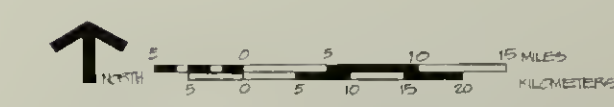
MANAGEMENT ZONES

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- NATURAL ZONE
- SPECIAL USE ZONE
- PARK DEVELOPMENT ZONE
- PRESERVE BOUNDARY
- PARK BOUNDARY
- ALAGNAK RIVER BOUNDARY



MANAGEMENT ZONES

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Table 1: Modes of Access Allowed for Subsistence and Recreational Activities

<u>Mode of Access</u>	<u>Allowed for Subsistence (Reference)</u>	<u>Allowed for Recreation (Reference)</u>	<u>Proposed Change</u>
Snowmachines	Yes ¹ ANILCA 811, 36 CFR 13.10, 46	Yes ¹ ANILCA 1110, 36 CFR 13.10	None
Off-Road Vehicles	No ² ANILCA 811, 36 CFR 13.14, 46	No ANILCA 101, 36 CFR 13.14	None
Motorboats	Yes ¹ ANILCA 811, 36 CFR 13.11, 46	Yes ¹ 36 CFR 13.11, Wilderness Act 4 (d)(1) ³	None
Fixed-Wing Aircraft	No ⁴ ANILCA 811, 36 CFR 13.13, 45	Yes ¹ 36 CFR 13.13, Wilderness Act 4(d)(1) ³	None
Helicopters	No 36 CFR 13.13	No ⁵ ANILCA 1110	None

1. The superintendent may close an area or restrict an activity on an emergency, temporary, or permanent basis (36 CFR 13.30).

2. The use of all-terrain vehicles (ATVs) for subsistence purposes will be restricted to designated routes in areas where their use is customary and traditional. The superintendent will designate routes in accordance with Executive Orders 11644 and 11989 and 36 CFR 4.19.

3. Section 4(d)(1) of the Wilderness Act states, in part, "within wilderness areas . . . the use of aircraft or motorboats, where these uses have already become established, may be permitted to continue subject to such restrictions as the Secretary [of the Interior] . . . deems desirable."

4. The use of fixed-wing aircraft for access to and from park and monument lands (not preserve units) for the purposes of taking fish and wildlife for subsistence is prohibited by 36 CFR 13.13. In extraordinary cases local rural residents may use aircraft on park lands for taking fish and wildlife in accordance with a permit issued by the superintendent (36 CFR 13.45, 13.73).

5. The use of a helicopter in any park area, other than at designated landing areas or pursuant to the terms and conditions of a permit issued by the superintendent, is prohibited by 36 CFR 13.13(f).

Table 2: General Access Provisions

Provision	Reference	Proposed Change
<u>Access to Inholdings</u> (Valid property or occupancy interest, including mining claims) Adequate and feasible access is ensured (not affirmatively provided without a permit under 36 CFR 13.10-14) that will not cause significant adverse impacts on natural or other values or jeopardize public health and safety; terms and conditions of permits are set by the superintendent.	ANILCA 1110 36 CFR 13.15, 31	None
<u>Temporary Access</u> (Applies to state and private landowners not covered in 36 CFR 13.10-15) The superintendent may permit temporary access across a park area for survey, geophysical, exploratory, or similar temporary activities on nonfederal lands when it is determined that such access will not result in permanent harm to park area resources.	ANILCA 1111 36 CFR 13.16	None
<u>Transportation and Utility Systems in and across Conservation System Units</u> Procedures for application are set; systems must be compatible with purposes for which the unit was established and no economically feasible and prudent alternative route exists; terms and conditions of rights-of-way are also established.	ANILCA Title XI	None
<u>Alaska Revised Statute 2477</u> The Park Service is aware that the state might assert certain claims of rights-of-way under RS 2477. The Park Service intends to cooperate with the state (and any other claimant) in identifying these claims, the nature, extent, and validity of which may vary, depending on the circumstances under which they were acquired or asserted. Notwithstanding that certain RS 2477 rights-of-way may exist, it will still be necessary for users of any right-of-way to comply with applicable NPS permit requirements.	43 USC 932	None
<u>Navigation Aids and Other Facilities</u> Access is provided to existing air and water navigation aids, communication sites, and facilities for weather, climate, and fisheries research and monitoring, subject to reasonable regulation. Access is also provided to facilities for national defense purposes.	ANILCA 1310	None
<u>Alaska Department of Fish and Game</u> The National Park Service recognizes the right of the department to enter onto park lands after timely notification to conduct routine management activities that do not involve construction, disturbance to the land, or alterations of ecosystems.	NPS/ADF&G Memorandum of Understanding	None
<u>Alaska Mineral Resource Assessment Program</u> Access by air is allowed for assessment activities permitted by ANILCA 1010, subject to regulations ensuring that such activities are carried out by the U.S. Geological Survey or its designated agents and in an environmentally sound manner.	ANILCA 1010	None
<u>General Research</u> The superintendent may permit the use of helicopters for research activities and may prescribe terms and conditions in accordance with federal regulations.	ANILCA 1010 36 CFR 2.5, 13.13	None

PRESERVE

PRIVATE LODGES IN OR N
THE PRESERVE MAY EXP
RECREATIONAL DEMAND I

NONVIANUK

PROVIDE DESIGNATED
CAMPING AREA

LAKE CAMP

IMPROVE BOAT LAUNCHING
AND DOCKING FACILITIES;
PROVIDE NATURE TRAIL;
EXPAND PARKING

NAKNEK

KING
SALMON

PARK
HEADQUARTERS

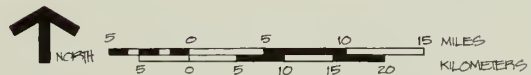
BROOKS CAMP

RELOCATE (IN PHASES)
CAMPGROUND, NPS ADMINISTRATIVE
OFFICES, NPS EMPLOYEE HOUSING,
AND CONCESSION FACILITIES
TO SPRUCE FOREST. RETAIN
OVERALL CAPACITY

--- PRESERVE BOUNDARY

--- PARK BOUNDARY

--- ALAGNAK RIVER BOUNDARY



PREFERRED ALTERNATIVE

GENERAL DEVELOPMENT

KATMAI NATIONAL PARK AND PRESERVE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

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DEC | FEB 25



- PRESERVE BOUNDARY
- .-.- PARK BOUNDARY
- _____ ALAGNAK RIVER BOUNDARY



PREFERRED ALTERNATIVE
GENERAL DEVELOPMENT

KATMAI NATIONAL PARK AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

Access to Lake Camp will continue to be by private vehicle on the existing 10-mile road from King Salmon. Lake Camp will be upgraded to include improved parking, a boat ramp, and day use facilities, thus enhancing opportunities for local residents to use the Naknek drainage.

The proposed plan also endorses expanded backcountry use in the highlands near the Angle/Takayoto creeks drainage and near Battle Lake. The proposed plan will further diversify visitor use by expanding canoeing and kayaking opportunities, which will be principally based in or near the Bay of Islands.

Finally, the proposed plan will continue to encourage float trips on the Alagnak River, both at the outlet of Nonvianuk Lake and at Kukaklek Lake.

Access within the park complex for traditional uses and to gain access to nonfederal lands within the park and preserve are governed by provisions of ANILCA. Section 1110 allows a variety of access modes within conservation system units for traditional activities. Section 1111 grants rights of access to private properties and state lands within conservation units for various uses. No additional road access into any private properties in the interior of the park and preserve has been proposed. The NPS position on individual properties or categories is outlined in the "Land Protection Plan."

VISITOR USE

Brooks Camp

Brooks Camp is located in an important feeding habitat for bears, contributing to competition for space between bears and humans. To resolve this conflict, the proposed plan recommends that all facilities gradually be relocated from Brooks Camp to a site in the spruce forest adjacent to the road to the Valley of Ten Thousand Smokes (see Brooks River Area map). A specific site will not be selected until the management plan has been approved, and extensive aerial and ground surveys, along with appropriate environmental analysis, have been performed.

Relocation will proceed in phases, as funding is available. The existing 28-site campground will be relocated as soon as possible because of the bear/human conflicts associated with its present location. A new 30-site campground will provide food caches, three-sided shelters, elevated sleeping platforms, water, and pit toilets. Subsequently, NPS administrative and maintenance functions will be transferred, followed by employee quarters, and finally by NPS visitor facilities and concessioner employee and guest facilities. To improve visitor services, an interpretive center will be constructed at the new site.

No additional guest facilities will be constructed at Brooks Camp, and the new lodge will not exceed 60 beds. The improvements required by the 15-year concession contract signed in 1981 will be completed.

Traditional activities at Brooks Camp have focused on wildlife observation, scenic viewing, and sportfishing. All of these activities can conflict with bears' use of Brooks River and adjacent areas in three general ways:

Sportfishing puts people in competition with bears for space when both are on the river at the same time during salmon spawning. When some bears learn it is easier to aggressively seek fish or other food from people, human life or property can be jeopardized, and a problem bear may have to be destroyed to remove the threat. Research currently underway to identify specific human behavior that leads to such situations may indicate ways in which the timing, level, or nature of human activities should be modified.

High numbers of people along Brooks River or active encroachment by people on a bear's territory can modify bear-fishing habits.

Aircraft and other activity along the shore of Naknek and Brooks lakes and the mouth of Brooks River can impede the traveling and fishing of bears in these areas.

The relocation of the Brooks Camp facilities and possible sportfishing restrictions will help alleviate these problems.

Other Activity Sites

To respond to the anticipated increase in visitor use of the park and preserve, the National Park Service will provide for additional activities at locations other than Brooks Camp. These expanded activities include the following:

wilderness canoeing excursions on Brooks Lake, in the Bay of Islands, on Grosvenor Lake and River, and on Savonoski River

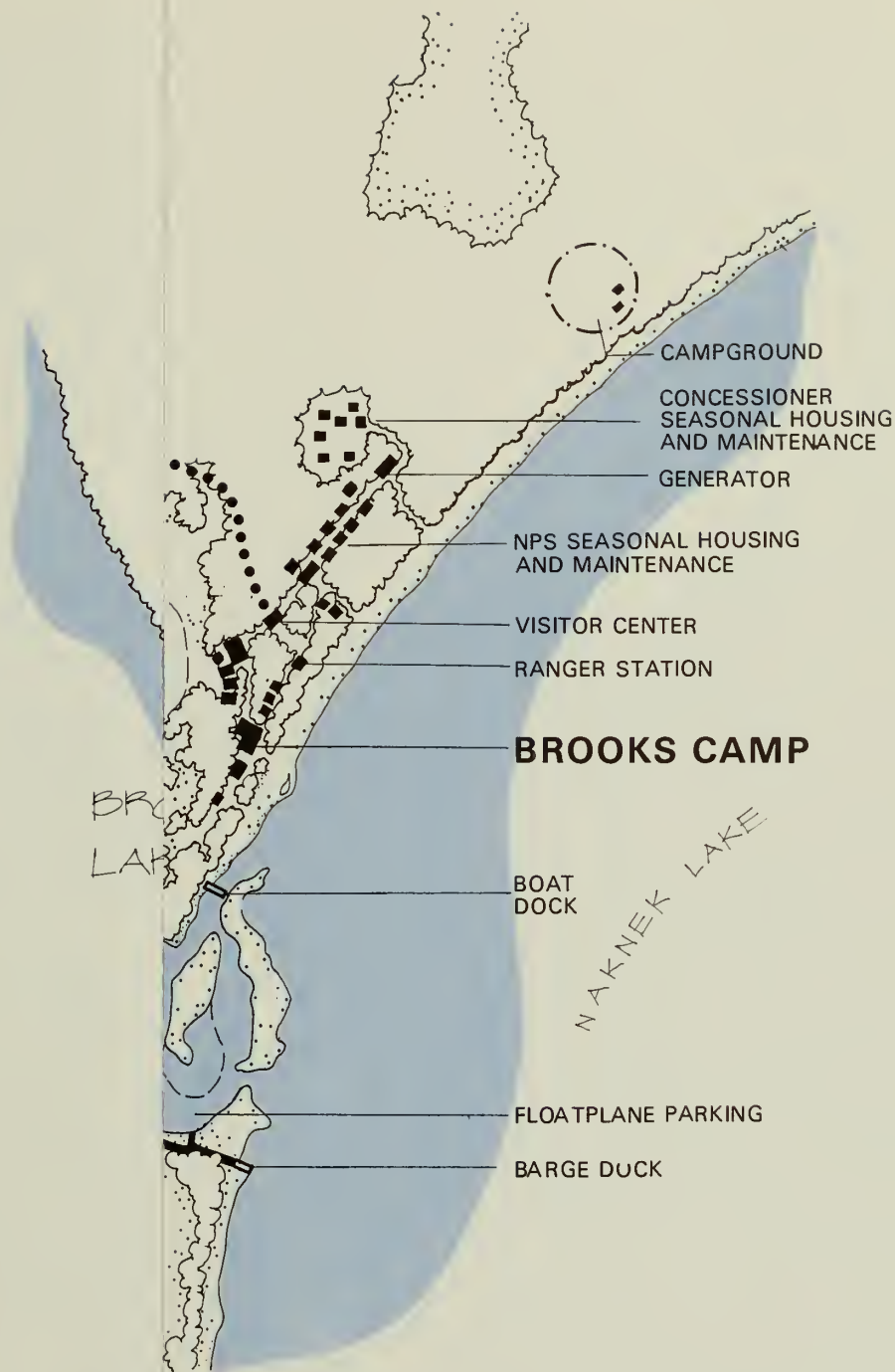
float trips down the Nonvianuk and Alagnak rivers

tundra trekking in the highlands overlooking Angle and Takayoto creeks in the southwestern corner of the park and in the vicinity of Battle Lake

scenic viewing and wildlife observation around Grosvenor and Coville lakes

sport fishing and hunting and river trips in the preserve

To support additional activities at Grosvenor Camp, a primitive camping area (consisting of five sites, a food cache, and a pit toilet) will be established. The lodge capacity may be increased from eight to 12 beds. Grosvenor Camp will be used as a staging area for concessioner boat trips and fishing excursions. Based from Grosvenor Camp, canoe trips could be made to Bay of Islands by way of a 1-mile portage, and to Grosvenor and Coville lakes. From a modestly expanded development at Grosvenor Camp, more visitors will be able to experience the majestic scenery and wildlife resources around Grosvenor Lake as an alternative to Brooks Camp and the Valley of Ten Thousand Smokes.



NORTH

0 100 200 400 FEET
0 30 120 METERS

BROOKS RIVER AREA

KATMAI NATIONAL PARK AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

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BROOKS
LAKE

SPRUCE FOREST

BROOKS FALLS

BEAR-VIEWING
PLATFORM

ESKIMO
PITHOUSE
EXHIBIT

TRAIL

CAMPGROUND
CONCESSIONER
SEASONAL HOUSING
AND MAINTENANCE
GENERATOR

NPS SEASONAL HOUSING
AND MAINTENANCE

VISITOR CENTER
RANGER STATION

BROOKS CAMP

BOAT
DOCK

FLOATPLANE PARKING

BARGE DOCK

NAKNEK LAKE

FLOATPLANE
LANDING

GENERATOR

NPS HOUSING

NPS HOUSING

MAINTENANCE AREA

TRAIL

VEHICLE
PARKING

FOOT
BRIDGE

TO VALLEY OF
TEN THOUSAND SMOKE
AND TO FUTURE CAMPGROUND
AND LODGE (SPECIFIC SITES
TO BE DETERMINED)



SPRUCE FOREST



MIXED FOREST
ALDER, COTTONWOOD, BIRCH, WILLOW



MARSH/BOG/MEADOW/BEACH



NORTH

0 100 200 400 FEET
0 30 120 METERS

BROOKS RIVER AREA

KATMAI NATIONAL PARK AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

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At Bay of Islands, a wilderness threshold camp will be established on the north shore of Naknek Lake. The camp will be accessible by floatplane, powerboat, or canoe/kayak, and it will have a food cache, pit toilets, and shelters for protection from weather. Rental canoes and kayaks will be available. Also a primitive seasonal ranger camp will be established. Visitors will use the camp as a staging area for guided canoe trips or for exploring on their own with rented canoes. The camp will also be a destination for people hiking, canoeing, and fishing in the immediate area. Canoe trips to Grosvenor Camp could also be made, or trips could be made around the Savonoski loop to the Iliuk Arm of Naknek Lake, where a concessioner-operated boat could transport visitors to Brooks Camp or back to Bay of Islands. In the short term, individual camping sites will not be provided at this location. Many users will be with groups, and the backcountry camping facilities will be tailored for groups of up to eight people.

Fishing at Nonvianuk Lake and float trips on the Alagnak River are becoming more popular. To support these activities and to minimize the impacts of higher visitation, a designated camping area will be provided near the lake's outlet. A food cache and pit toilet will be constructed. Facilities will be designed to serve two groups of up to six people each.

At the outlet of Kukaklek Lake similar facilities may be necessary as use increases. The National Park Service now has an easement for a designated campsite at the outlet. If demand dictates and more facilities become necessary, the National Park Service will seek a cooperative agreement with the Igiugig Village Corporation to provide the necessary services and facilities on their lands.

The tundra highlands in the park and preserve, above 1,000 feet elevation, provide opportunities for overland hiking excursions. The rolling hills above Angle and Takayoto creeks offer especially rich opportunities for the growing numbers of people seeking wilderness adventures. Hiking in this area will be encouraged by establishing a camping area, pit toilet, and food cache near the Yori Pass access point on the road to the Valley of Ten Thousand Smokes. This area will serve as a base camp for day hikers or as a pickup point for backpackers starting on or returning from extended hikes. Visitors wanting to hike in this area can get to the trailhead on vans that currently serve the Valley of Ten Thousand Smokes. A primitive camping area will be designed to serve groups of up to eight individuals.

The Valley of Ten Thousand Smokes will continue to be a major attraction, and the concessioner van service will still transport visitors from Brooks Camp. Hikers to the valley will still be able to use two cabins at Baked Mountain for shelter. The cabins can serve up to eight people.

Lake Camp, because of its proximity to King Salmon and the access road, is a popular activity site for visitors and accounts for over 75 percent of total park visits. Virtually all of these visitors are day users. Boat launching and docking facilities will be improved to accommodate increasing use. Because the area is close to King Salmon and Naknek, a nature trail and two picnic shelters will be developed. The parking area

will be expanded to accommodate 10 vehicles plus four vehicles with boat trailers.

As the demand for sport hunting and fishing expands, private lodges in or near the preserve may increase their capacities. Any expansions will be keeping with site and resource constraints, which will be evaluated on a case-by-case basis. Considerations include the preservation of healthy fish and wildlife populations in their natural diversity; the impacts of visitor activities and access methods on habitat use, wildlife movements, and reproduction of wildlife; and the effects of facility operations (such as garbage removal and sewage treatment) on wildlife, water quality and hydrology, and other natural resources.

Carrying Capacity

The carrying capacity for recreation is the amount and type of use an area can sustain over time without impairing the natural or cultural environment or the visitor experience. Several sites in the park, including the Brooks Camp, American Creek, Big River, and Kulik River areas, are currently thought to have visitor use levels that have the potential of affecting the visitor experience or natural resources. To prevent any adverse effects, the Park Service will monitor visitor use and resource impacts in these areas. As adverse effects are identified, alternative actions will be considered.

In other areas of the park where visitor use is generally very low no carrying capacity study is recommended at this time. Resources will be monitored for adverse effects. If visitor use levels appear to be compromising the quality of the visitor experience or if the resources of the park are being degraded, a carrying capacity study will be conducted at that time, and limitations on use levels or activities may be instituted.

PARK OPERATIONS

To ensure adequate resource protection and to provide for appropriate visitor services, Katmai will be divided into three management districts. The districts will generally conform to geographic features or management needs and will include the central lake area in the park, the preserve, and the coastal/Aleutian Range region. Within these districts, park operations will be strengthened to support visitor activities and to improve resource management.

In the central lake district the summer headquarters operation will remain at Brooks Camp. Eventually it will be moved to the spruce forest near the road to the Valley of Ten Thousand Smokes. Small seasonal ranger camps will also be established at Bay of Islands and Grosvenor Camp to support expanded visitor use in these areas.

To improve resource protection and public contact along the coast, seasonal ranger camps will be established at Geographic Harbor, Kukak Bay, and near Big River.

Depending on visitor use patterns and needs, seasonal ranger stations may be established in the northern sector of the complex at the outlet of Kukaklek Lake and at Battle Lake Camp, augmenting the existing ranger camp at the outlet of Nonvianuk Lake.

Park headquarters, which also functions as the administrative headquarters for Aniakchak National Monument and Preserve, will continue to be located in King Salmon.

ANILCA contains two provisions that allow preference to be given to native corporations and local residents in contracting for visitor services to be provided within conservation system units (sec. 1307(b)). Also individuals who live in or near conservation units and who have special expertise with regard to natural and cultural resources of the area should be employed where possible (sec. 1308(a)). For Katmai National Park and Preserve, every effort will continue to be made to carry out these two provisions of ANILCA.

In accordance with ANILCA, section 1316(b), the National Park Service proposes not to allow the establishment on public lands of any new "tent platforms, shelters, and other temporary facilities and equipment directly and necessarily related to" the taking of fish and wildlife in the preserve portion of Katmai National Park and Preserve. Such new facilities or equipment would constitute a significant expansion of existing facilities or uses that would be detrimental to the purposes for which the preserve was established. Temporary structures in support of subsistence activities are authorized under existing regulations (36 CFR 13.17).

The staff needs for Katmai National Park and Preserve are as follows (some positions are not currently funded):

- superintendent
- chief ranger
- facility manager
- management assistant
- resource management specialist
- district rangers
- administrative officer
- maintenance worker
- clerk typist
- seasonal rangers
- seasonal maintenance workers

DEVELOPMENT CONCEPT PLANS

Before this general management planning effort was undertaken, the King Salmon, Brooks Camp, and Grosvenor Camp areas within Katmai National Park and Preserve were analyzed to determine their potential for accommodating facilities for visitor services and park operations. The development concept plans that were approved for these areas are still valid, and they have been incorporated into this proposed management plan. Once the proposed plan has been approved, other recommended development sites will be studied at the same level of detail.

King Salmon

The 1982 Development Concept Plan / Environmental Assessment for King Salmon addresses expanded management needs at Katmai. The plan identifies the need for additional facilities at park headquarters to accommodate the increased responsibilities of NPS staff. Alternatives for King Salmon were considered, and a proposal was recommended.

The proposal calls for four new housing units to be constructed for permanent staff. The existing administration/maintenance building will be converted to a maintenance facility, and a new administration building will be constructed. The National Park Service and the Fish and Wildlife Service are currently studying the feasibility of a joint information center in King Salmon; the center would be managed cooperatively with the Alaska Department of Fish and Game. This facility should be located at or near the King Salmon airport.

Brooks Camp and Grosvenor Camp

In 1981 the National Park Service and the concessioner at Katmai signed a 15-year contract for a variety of concession services. That contract required a number of improvements at Brooks Camp and Grosvenor Camp. Subsequently, an Environmental Assessment / Draft Development Concept Plan was prepared to examine alternatives and impacts. At Brooks Camp, the proposal calls for new housing for 16 employees, a new maintenance facility, and a new store. Some existing structures will be removed, and the existing dining facility will be renovated. These actions are scheduled to be completed in 1985. Any future development needs will be accommodated at the new development site in the spruce forest adjacent to the road to the Valley of Ten Thousand Smokes.

At Grosvenor Camp, a new generator building and a new dining/kitchen facility are being built. The old facilities will be removed.

Table 3: Summary of Proposed Development Actions

<u>Location</u>	<u>Existing Conditions</u>	<u>Proposed Change</u>
Brooks Camp	Lodging--15 units (60-person capacity)	Relocate all development eventually to spruce forest near road to Valley of Ten Thousand Smokes (60-person lodge capacity)
	Campground--28 sites	Construct new 30-site campground in spruce forest
	Housing, maintenance, and services	Relocate all development eventually to spruce forest
Grosvenor Camp	Lodging--2 units (8-person capacity)	May add 1 unit (4-person capacity)
	Campsites--none	Construct 5-site primitive camping area
	Housing, maintenance, and services	No change
Bay of Islands	No facilities	Establish wilderness threshold camp, staging area, and ranger station; provide rental boat service (8-person capacity) and and boat storage
Nonvianuk Lake	Seasonal ranger camp	No change; designate camping area (12-person capacity)
Yori Pass access point	No facilities	Establish staging area and primitive camping area (8-person capacity)
Valley of Ten Thousand Smokes	Staging area, overlook, 1 cabin shelter	No change
Lake Camp	Boat launch and parking area	Improve boat launching and docking facilities; add two picnic shelters and interpretive trail; improve parking area (10 vehicles plus 4 vehicles with boat trailers)
Kulik Lake, Battle Lake, Nonvianuk Lake, Enchanted Lake--private lodges	Lodging and guide services (total capacity of 40 persons)	Possible moderate expansion of these private lodges

Note: All access will continue to be by floatplane or boat, except for continued vehicle access to Lake Camp.

NATURAL RESOURCE MANAGEMENT

The emphasis of natural resource management will be to understand and preserve the ecological processes that are integral to the ecosystems of Katmai National Park and Preserve. Major management objectives for natural resources are to maintain the natural environment unimpaired for future generations by minimizing the environmental impacts associated with human activities. Management decisions and activities will be based on the analysis and evaluation of information obtained through inventories, monitoring, and research. Because the natural systems within the park are considered largely undisturbed, little active restoration is currently required or foreseen. Specific resource management objectives will be achieved primarily through nonconsumptive and nonmanipulative methods. The following issues are listed in priority order and will be addressed as funding and staffing levels permit.

Katmai is inhabited by the largest unhunted population of Alaskan brown bears in existence, and these bears have had only a relatively short period of association with modern man. Even so, some bears have lost their natural fear of man. A past solution in many areas has been to relocate problem bears; however, this procedure has two flaws. First, it does not remedy the situation that caused the bears to become a problem, and the bears either return or remain a problem somewhere else. Second, removal of bears alters the genetic and social integrity of the natural bear population. Unhunted and unmanipulated natural bear populations are almost unavailable elsewhere, and Katmai's population is a valuable control group for studies of other populations. Removal of bears disrupts the natural social diversity of a population and in time leads to a population where the shy and reclusive are unnaturally selected.

The objectives of Katmai's bear management plan are to retain a naturally regulated population of brown bears in the park and to preclude the food-reinforced attraction of bears to people and thereby minimize confrontations between bears and people. The plan provides for (1) informing park visitors about ways to avoid dangerous encounters, (2) ensuring that human food and garbage are not available to bears, (3) monitoring bear behavior in interactions with people, (4) responding to confrontations between bears and people, (5) minimizing human impacts on bear behavior and patterns of habitat use, (6) monitoring bear population levels, and (7) carrying out antipoaching activities. Research is underway to examine factors that influence the behavior of bears toward people and to identify long-term effects on bears because of human activities in the park and preserve.

Katmai embraces major watersheds that provide salmon-spawning habitat vital to the commercial fishing industry, and thus the economy, of the Bristol Bay region. Migrating salmon also represent a unique upstream flow of nutrients into park ecosystems, and they are a critical source of food for a variety of wildlife species. The salmon-spawning habitat will be preserved in its natural condition. The level of escapement into the park and preserve is set by the Alaska Department of Fish and Game (ADF&G).

The Naknek drainage is world-famous for its trophy-sized rainbow trout, and rainbow in the 12-15 pound range are not uncommon. Sportfishing in the park and preserve is regulated by the Alaska Department of Fish and Game, with some more restrictive NPS regulations. Creel censuses, tagging programs, and spawning surveys have been conducted by the department to assess the effects of sportfishing harvest on rainbow trout and the population dynamics and movements of rainbow trout in the Naknek drainage. Regular and continuing creel censuses are needed to monitor harvest of rainbow trout and other fish species. The Park Service will continue to strongly encourage catch-and-release sportfishing, as is currently being conducted by most commercial guides and lodges.

The National Park Service is directed by ANILCA to preserve healthy wildlife populations in Katmai National Preserve and natural and healthy populations in Katmai National Park. In addition to the nonconsumptive uses of wildlife that take place throughout the park and preserve, subsistence and sport hunting are permitted in the preserve in accordance with state hunting regulations. A memorandum of understanding concerning wildlife management exists between the Alaska Department of Fish and Game, which is responsible for management and protection of wildlife throughout the state, and the National Park Service, which is responsible for conserving wildlife and its habitat in Katmai. Both agencies will continue to cooperate in wildlife population monitoring, research on individual species and interspecific relationships, and antipoaching efforts (see appendix D).

Katmai may be inhabited by the American peregrine falcon, and Aleutian Canada geese may migrate through the park. Information on the habitat requirements and life histories, as well as documentation of sightings, of these two endangered species will be compiled to ensure that management decisions do not adversely affect the species or their habitat.

A draft plan for monitoring and managing visitor use of the Katmai backcountry has been developed. Visitor activities and impacts will be systematically monitored, using direct observation as well as permittees' reports, so that activities may be modified and maintenance carried out as adverse effects are identified.

Natural processes that are fundamental to the ecosystems of Katmai will be identified, and a monitoring program will be established to obtain baseline information and identify human-induced disturbances. Processes to be addressed include nutrient flow and the cycles and trends in air and water quality.

The deteriorating Brooks River fish ladder, constructed in 1949, will be blocked or removed. Other salmon enhancement projects have been proposed, including a fish ladder on Strike Creek and a hatchery on the lower Naknek River, with fry plantings in lakes and streams within the park. The National Park Service will not permit aquaculture programs within the park and preserve.

Resource inventories of the coastal uplands, rivers, beaches, and islands will be carried out to identify seasonal variations and geographic

distribution of species and habitats. Resources that will be inventoried include physical and biological characteristics of the rivers and beaches, as well as populations and habitats of marine mammals, seabirds, and other coastal wildlife. Inventory information will be used to establish a monitoring program.

Plant communities of the park will be mapped, and patterns of plant succession will be identified. Species composition of unusual communities, as well as plant/insect and plant/wildlife community relationships, will be examined. Special attention will be given to plants, such as lichens, that are particularly sensitive to environmental degradation. The natural process of revegetation in the Valley of Ten Thousand Smokes will be documented.

Although the frequency of wildfire in Katmai has historically been low, it is an important process in the perpetuation of natural ecosystems. The park's fire management plan outlines objectives, procedures, and responsibilities for managing fires in Katmai. The overall objective of the plan is to let fires burn except where property or people would be threatened. The National Park Service is participating in the development of an interagency fire management plan for the Alaska Peninsula, which was begun during 1984.

The lakes and rivers of Katmai are the basis for a significant part of the commercial salmon fishery that is vital to the regional economy. Most access to the park is water-based, and developments are generally situated adjacent to water bodies. A systematic program of water-quality monitoring adjacent to developed areas will be carried out to ensure that any effects of human activities on the water environment are detected and minimized.

Subsistence use of lands and waters is governed by provisions of ANILCA, which allow subsistence activities in the preserve while prohibiting them in the park. Subsistence activities are subject to state and federal regulations. To ensure that the level of subsistence use within the preserve is consistent with the conservation of healthy populations of fish and wildlife, the National Park Service will cooperate with the state of Alaska to monitor the effects of subsistence use.

Interest has been expressed in reopening some areas to traditional subsistence activities, particularly the western end of Naknek Lake and its outlet into Naknek River for fishing, and the newly expanded parklands for hunting and trapping. Such a change would require congressional action. Although the National Park Service is sensitive to the concerns of local people, the Park Service will not take an active role in initiating legislation that would reopen portions of the park to subsistence uses.

Research will be carried out to identify causes of the seasonal fluctuations in the level of Naknek Lake and the long-term decline in the lake level. Impacts of lake-level changes on water-borne transportation, lake fisheries, shoreline vegetation, and lakeshore development will also be addressed.

The continuing volcanic activity of Katmai provides an excellent opportunity to study volcanism and glacier/volcano interactions. Periodic aerial photographic surveys will be carried out to document changing geological features, including the configuration of volcanic vents, the morphology of the ash flow in the Valley of Ten Thousand Smokes, glacier termini, major outwash areas, and river mouths.

Future land uses and resource management practices adjacent to Katmai have the potential to influence park resources, management operations, and the level and character of park visitation. The National Park Service will continue to monitor and participate in land-use planning activities in the upper Alaska Peninsula.

CULTURAL RESOURCE MANAGEMENT

The significant cultural resources in Katmai National Park and Preserve consist of prehistoric and historic archeological sites related to the occupation of the area before the 1912 volcanic eruption. Post-eruption historic resources are neither as abundant nor as significant as archeological resources because of the 1912 eruption and the natural deterioration of abandoned structures. Those historic structures that have survived are primarily cabins associated with trapping and fox-farming activities in the area. Proposed actions that might affect cultural resources will be scheduled and undertaken in accordance with the park's resource management program. This program is revised annually, or as necessary, to reflect changing preservation needs and management priorities.

A cultural sites inventory and a base map have been prepared and will be maintained by the park. The base map will be updated as more information is gathered on the location of cultural resources within the park. After professional evaluation, all cultural resources that qualify will be nominated to the National Register of Historic Places. (The National Register is a list of properties that are worthy of preservation and that must be taken into account when federal agencies are planning any undertaking that would affect them.)

ARCHEOLOGICAL RESOURCES

Several archeological studies were conducted on monument lands before the 1978 expansion. It is reasonably certain that the principal habitation sites on those lands have been located and at least recorded. As a result, the prehistory of the Katmai area is one of the best known cultural sequences in Alaska. Although the archeology of a few areas in Katmai is well known, no detailed overall archeological surveys have been conducted within the park. In addition, lands recently added to the park have not been systematically evaluated for their cultural resource potential.

Archeological resources are important both in terms of concentration and contribution to the knowledge of Alaskan prehistory. The Brooks River archeological district contains 22 sites with 750 house depressions, making it one of the greatest known concentrations of prehistoric houses in Alaska. Katmai is also one of four places known to contain winter houses exhibiting the Arctic Small-Tool tradition. Eight archeological sites in Katmai are now listed on the National Register of Historic Places. Historic archeological sites are also present within Katmai because of the burial of villages and living areas by volcanic ash and debris; these areas were then abandoned.

Systematic archeological surveys will be carried out to determine the nature and extent of archeological resources within the park. Particular attention will be focused on the 1.5 million acres within the park that have medium to high potential for archeological resources. Major areas to be surveyed include the lakes and waterways of the Naknek drainage, the Alagnak drainage, the Angle Creek drainage, and the Pacific coast north

of Hallo Bay. Reports of these surveys will provide an overview of the park's archeological record. Sites will be prioritized by their significance, and recommendations will be made about their future management. Those sites found to meet the criteria will be nominated to the National Register and will be protected to the extent possible.

Any proposed developments will be designed to avoid impacts to the significant known archeological resources of the area. Ground-disturbing activities will be preceded by archeological surveys and testing.

HISTORIC STRUCTURES

A 1971 historic resource study by John A. Hussey for Katmai provides a basis for understanding the park's history and its original establishment. The resource study ends with the establishment of the monument in 1918. This study will be updated to include recent land additions and developments.

There are few post-1912 historic structures in the park and preserve. Existing historic structures are related to trapping and fox-farming activities that resumed after the volcanic eruptions. Some cabins scattered throughout the park have been identified but have not been evaluated for their historical significance. Recently, Fure's cabin--a trapper's cabin displaying exceptional construction techniques--has been nominated to the National Register of Historic Places. Evidence of the limited return to the area by people after the eruption will be given special attention to ensure its preservation and interpretation for the public. Structures will be evaluated and stabilized, rehabilitated, or recorded as appropriate, based on their condition, accessibility, potential for adaptive use, or cost of rehabilitation. Given the harsh nature of the climate, seriously deteriorated resources will not be rehabilitated, nor will such properties be stabilized or protected from the effects of natural elements.

All abovegrade structures, whether historic or prehistoric, will be evaluated for their potential to be included on the park's List of Classified Structures. (This is an internal NPS listing that is an initial specification of treatment and use of abovegrade structures.)

CONTEMPORARY NATIVE AMERICAN CONCERNS

Until native land conveyances have been completed, the National Park Service will protect, preserve, and manage all Alaska native historic sites identified under the provisions of section 14(h)(1) of the Alaska Native Claims Settlement Act (ANCSA) of 1971 as properties eligible for the National Register.

The ongoing identification of areas of sacred and traditional importance to local native Americans will be continued by professional archeologists and anthropologists. Measures will be taken to ensure the protection of these properties. Access to Old Savonoski by natives of the region will continue to be ensured by the National Park Service.

LAND PROTECTION PLAN

SUMMARY

Current Ownership, including the Alagnak Wild River (in acres)

Federal (including 35,210 acres of selections by native corporations and individuals; not all selections expected to be conveyed because they exceed total acreage entitlements)	4,009,680
Nonfederal	109,486
Total	<u>4,119,166</u>

Acres Remaining to be Protected:

State (including 25,434 acres outside the park boundary)	75,294
Submerged Lands/Navigable Waters	42,512
Private	327
Allotment applications, if conveyed	4,811
Village corporations (selected and conveyed)	46,321
Regional corporation (selected and conveyed)	4,590

Method of Protection Proposed:

Fee Acquisition	
by exchange	112,439
by relinquishment	640
by purchase	216
Less-than-fee acquisition	4,771
Alaska Land Bank	13,126
Cooperative agreement	42,663

Statutory Acreage Ceiling: None

Funding Status as of December 1, 1984:

Authorized acquisition ceiling	None
Appropriated to date	\$ 0
Obligated to date	\$ 0
Unobligated balance	\$ 0

Top Priorities:

Fee-simple acquisition of state lands through land exchange to protect wildlife.

Fee-simple acquisition of the allotment at Brooks Camp, if conveyed to the claimant, to manage visitor use.

Acquisition of three mining claims to prevent mineral development that would adversely affect resources.

Fee-simple acquisition of three parcels owned by the Russian Orthodox Church to prevent commercial development and loss of cultural resources.

INTRODUCTION

In May 1982, the Department of the Interior issued a policy statement for agencies using the federal portion of the Land and Water Conservation Fund. This policy requires that each agency using the fund, in carrying out its responsibility for land protection in federally administered areas, will

- identify what lands or interests in land need to be in federal ownership to achieve management purposes consistent with public objectives

- use to the maximum extent practical cost-effective alternatives to direct federal purchase of private lands, and when acquisition is necessary, acquire or retain only the minimum interests needed to meet management objectives

- cooperate with landowners, other federal agencies, state and local governments, and the private sector to protect land for resource conservation or manage it for public use

- formulate, or revise as necessary, plans for land acquisition and resource use or protection to ensure that sociocultural impacts are considered and that the most outstanding areas are adequately managed

In response to this policy, the National Park Service requires that a land protection plan be prepared for each unit of the national park system that contains private or other nonfederal land or interest in land within its authorized boundary.

The guiding principle of each land protection plan is to ensure the protection of that unit of the national park system, consistent with the stated purposes for which it was created and administered. Land protection plans are prepared to accomplish the following:

- determine what lands or interests in land need to be in public ownership and what means of protection other than fee acquisition are available to achieve the unit purpose as established by Congress

- inform landowners about NPS intentions to buy or protect land within the unit through other means

- help managers identify priorities for requesting and allocating funds to protect land and unit resources

- find opportunities to help protect the unit by cooperating with state or local governments, landowners, and the private sector

The major elements to be addressed by this plan include (1) the identification of nonfederal lands within the unit's boundaries that need to be protected; (2) the minimum interest in those lands that the National Park Service must acquire; (3) the recommended means of acquiring the land or an interest in it; (4) priorities for protection to ensure that

available funds are used to protect the most important resources; (5) impacts of implementing the land protection plan on local residents; (6) the amount, type, and density of private use or development that can take place without harming unit resources; and (7) external activities that have or may have effects on unit resources and land protection requirements.

Specific land protection issues that are addressed by this plan are the management of visitor use and access, protection of wildlife populations and spawning habitat, and protection of wilderness character and scenic views.

This plan does not constitute an offer to purchase land or interest in land; neither does it diminish the rights of nonfederal landowners. The plan is intended to guide subsequent land protection activities subject to the availability of funds and other constraints.

PURPOSE OF THE PARK AND RESOURCES TO BE PROTECTED

Significance and Purpose of the Park

As units of the national park system, Katmai National Park and Preserve and the Alagnak Wild River are to be managed "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (16 USC 1). Under the provisions of ANILCA, the park and preserve are established "to protect habitats for, and populations of, fish and wildlife, including but not limited to, high concentrations of brown/grizzly bears and their denning areas; to maintain unimpaired the water habitats for significant salmon populations; and to protect scenic, geological, cultural, and recreational features." The significance of the park and preserve are further described in the "Introduction" to this document.

Resource Description

The landscape of Katmai has been shaped by volcanism and glaciation. The Valley of Ten Thousand Smokes, Novarupta, Katmai Caldera, and many other volcanic features testify to the cataclysmic eruption of 1912, and many of the mountains of the Aleutian Range are active volcanoes. Large glaciers in the past carved the landscape of the present-day lake system. The watersheds of the park and preserve provide spawning habitat for salmon, and the commercial salmon fishery in Bristol Bay is vital to the regional economy. The watersheds also provide habitat for a variety of other fish species. The wildlife habitats of the park and preserve support a variety of species, including the largest unhunted population of Alaskan brown bears in existence.

Cultural resources of the unit include three archeological districts and five archeological sites nominated to or listed on the National Register of Historic Places. Cabins and other structures and ruins stand as evidence of changing lifestyles after Russian contact with natives and the subsequent immigration of Europeans.

More detailed information on natural and cultural resources of the park and preserve is included in "The Environment" part of this document.

Legislative Authorities

ANILCA provides a general framework for land protection for the newly established conservation units in Alaska. Section 1302 provides the general authorities for land acquisition (see appendix C). The secretary of the interior is authorized to acquire by purchase, donation, exchange, or other means any lands or interests in lands within the park, preserve, or wild river corridor. However, any lands or interests in lands owned by the state and local governments or by native village and regional corporations may be acquired only with the consent of the owners. In addition, lands owned by natives that have been allotted under ANCSA and who received title to the surface estate of lands from a village corporation as a primary place of residence, business, or subsistence campsite (section 14(c)(1)), or from the secretary of interior as a primary place of residence (section 14(h)(5)), may be acquired only with the consent of the owner. However, if the secretary determines that the land is no longer being used for the purpose for which it was conveyed and that the use is or will be detrimental to the purposes of the park, preserve, or national wild river, then it may be acquired.

Native allotments or other private small tracts may be acquired without consent only after an exchange of other lands of similar characteristics and like value, if available, is offered and the owner chooses not to accept the exchange. Exchanges may be complicated by present selections and past conveyances of lands within the state, and by the lack of suitable substitute lands.

No improved property will be acquired without the consent of the owner unless such acquisition is necessary for the protection of resources or for the protection of those values listed in ANILCA. When an owner of improved property consents to exchange lands or to sell to the United States, the owner may retain a right of use and occupancy for noncommercial residential and recreational use by agreement with the National Park Service (see appendix C).

Sections 1302(i)(1) and (2) of ANILCA authorize the secretary of the interior to acquire, by donation or exchange, state-owned or validly selected lands that are contiguous to the park or preserve. Any lands so acquired will become part of the unit without reference to the 23,000-acre restriction on minor boundary adjustments as defined in section 103(b).

Section 103(b) states that only the public land within the boundaries of a conservation system unit shall be deemed to be included as a portion of the unit. State, native, and other private lands within the boundaries are not subject to regulations that apply solely to federal lands. If conveyed to the federal government under the provisions cited above, such lands will become part of the unit and become subject to those federal regulations.

In addition to complying with the above legislative and administrative requirements, the National Park Service is required to administer the area as a unit of the national park system pursuant to the provisions of the act of August 25, 1916 (39 Stat. 535), as amended and supplemented (16 USC 1 et seq.), and in accordance with the provisions of title 36 of the Code of Federal Regulations, and other applicable laws and regulations. The National Park Service has proprietary jurisdiction over the federally owned lands in the park, preserve, and wild river corridor.

Resource Management and Visitor Use Objectives

Major resource management objectives are the preservation of natural ecosystems (including coastal wildlife, spawning habitat for anadromous fish, and a naturally regulated population of brown bears), the identification and protection of archeological and historical resources, and the preservation of the wilderness character of the park, preserve, and wild river. Visitor use objectives include providing for visitor enjoyment and appreciation of the area, consistent with the natural and cultural resource values. The complete management objectives are included in appendix B.

LANDOWNERSHIP AND USES

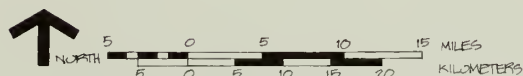
Approximately 4,009,680 acres (97 percent) of the park, preserve, and wild river are federally owned, and 109,486 acres (3 percent) are nonfederally owned. Native corporations and individuals have applied for 35,210 acres of federal land. The various ownerships are shown in table 4 and on the Land Status map.

Table 4: Current Landownership

<u>Existing Ownership</u>	<u>Acres</u>
Federal	4,009,680
State	49,770
Submerged Lands/Navigable Waters	42,512
Village Corporation	15,922
Regional Corporation	955
Private	327
Total	4,119,166
<u>Native Land Applications</u>	
Allotments	4,811
Village Corporation Selections	30,399
Regional Corporation Selections	3,635
Total	38,845
Overlapping Selections	3,635



-  STATE LAND AND APPLICATION
-  NATIVE REGIONAL CORPORATION
APPLICATION / PATENT AND INTERIM CONVEYANCE
-  NATIVE VILLAGE CORPORATION
APPLICATION / PATENT AND INTERIM CONVEYANCE
-  SMALL TRACT ENTRY
-  UNPATENTED MINING CLAIM
- 1-9** PROTECTION PRIORITIES
-  PRESERVE BOUNDARY
-  PARK BOUNDARY
-  ALAGNAK RIVER BOUNDARY



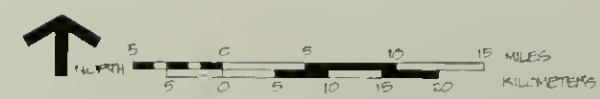
LAND STATUS AND PROTECTION PRIORITIES

KATMAI NATIONAL PARK AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

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DEC FEB 05



- STATE LAND AND APPLICATION
- NATIVE REGIONAL CORPORATION APPLICATION / PATENT AND INTERIM CONVEYANCE
- NATIVE VILLAGE CORPORATION APPLICATION / PATENT AND INTERIM CONVEYANCE
- SMALL TRACT ENTRY
- UNPATENTED MINING CLAIM
- 1-9 PROTECTION PRIORITIES
- PRESERVE BOUNDARY
- PARK BOUNDARY
- ALAGNAK RIVER BOUNDARY



LAND STATUS AND PROTECTION PRIORITIES

KATMAI NATIONAL PARK AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

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Ownership of Nonfederal Lands

Current land uses of the approximately 144,696 acres of nonfederal land and lands selected by native corporations and individuals within the park, preserve, and wild river corridor include the following:

several individual native allotments and claims, located primarily along the Nonvianuk River, near the west end of Naknek Lake, and near the southwest end of Brooks Lake, which have either no development or a small number of structures for private use by the allottees and their families

one individual native allotment application for the site of Brooks Lodge and its surroundings, which is currently in litigation

three unpatented lode claims, located northeast of Battle Lake, that are currently undergoing validity determination

three parcels located on the coast and patented by the Russian Orthodox Church in America, which are currently undeveloped

patented land at Lake Camp, on the west end of Naknek Lake, that has been subdivided into lots on which cabins have been constructed

an area west of Naknek Lake, including subsurface rights, which has been interimly conveyed in part to Paug-vik and Qinuyang village corporations

an area on the southwest side of Kukaklek Lake, including subsurface rights, which has been interimly conveyed in part to Igiugig Village Corporation--a 50-foot-wide easement from the lake to the west boundary of the preserve and a 1-acre easement at the foot of Kukaklek Lake were reserved for public use and access

an area in the northeast corner of the preserve, including subsurface rights, which has been interimly conveyed to Bristol Bay Regional Corporation

a selection by the Levelock Village Corporation near the west end of the Alagnak Wild River

five parcels, including two at Kulik Lake, one at Nonvianuk Lake, and one at Battle Lake patented to Katmailand, Inc., and one parcel at Enchanted Lake patented to Richard Matthews--an airstrip is partially situated on one parcel on Kulik Lake; sportfishing lodges have been established on the other parcels

an area on the north side of Cape Douglas that is owned by the state and administered by the Alaska Department of Natural Resources

submerged lands off the coast of the park or beneath navigable bodies of water, but within the park, preserve, or wild river boundary, which are owned and administered by the state of

Alaska--the Submerged Lands Act of 1953 and the Alaska Statehood Act of 1958 provide for state ownership of the beds of navigable waters to the "ordinary high water mark"; identification of navigable waters by the state and the Bureau of Land Management is currently underway

Existing and Potential Uses of Nonfederal Lands

Small parcels are currently used for private residential, recreational, and subsistence purposes. Lodges are used commercially as bases for sportfishing activities. Although located in the park, the Paug-vik, Qinuyang, and state-owned lands are used for sporthunting. Portions of the Paug-vik allotment are undergoing subdivision, and one commercial sportfishing lodge has been constructed.

There is the potential for subdivision and commercial development on any nonfederal land in the park and preserve. Any activities that impaired the values identified above would be considered incompatible uses of the land. In addition, any significant increase in the human resident population within the boundaries of the park, preserve, or wild river corridor would be incompatible with the preservation of the unit's wilderness character.

Potential Incompatible Uses. Potential uses of nonfederal lands that would be incompatible with the ecological, cultural, wilderness, and recreational values of the park, preserve, and wild river include the following:

- activities that resulted in water pollution, sedimentation, or other impairment of anadromous fish spawning habitat

- contamination of other surface waters or groundwater

- construction of access roads, airstrips, and other surface disturbances that disrupted drainage patterns, accelerated erosion, and increased runoff and sediment loads

- activities that impaired wildlife use of habitat on adjacent federal lands

- trapping or hunting that impaired the natural condition of wildlife populations in the park or that impaired the healthy condition of wildlife populations in the preserve or wild river corridor

- disposal of refuse in a manner that attracted bears

- activities that damaged or contributed to damage of archeological or historical resources

- impairment of the wilderness character or scenic quality of the unit

- blocking of public access for recreational use

new commercial development or significant expansion of an existing commercial facility

new airstrips

Compatible Uses. Many current or potential uses of nonfederal land would be compatible with the purposes and values of the park, preserve, and wild river. Compatible uses include the following:

private use of nonfederal lands for residential, recreational, or subsistence activities that did not adversely affect wildlife or other values of the park or preserve

repair, replacement, or modification of existing structures, as long as the size, materials, and color were appropriate

construction of new residential structures, as long as the size, materials, and color were appropriate

continued operation of commercial facilities that provided public accommodations and services consistent with the preservation of ecological, cultural, and wilderness values

External Conditions Affecting Land Protection

ANILCA section 103(b) provides for minor boundary adjustments of up to 23,000 acres. Section 1302(i) authorizes acquisition by donation or exchange of state-owned or state-selected lands that are contiguous to a conservation unit. Except for these provisions, the National Park Service cannot acquire interests in lands outside the unit. Nevertheless, the use of lands outside the unit can affect the integrity of resources as well as the quality of visitors' experiences within the unit: in a positive way if the uses are harmonious with the unit's mission, or in a negative way if they conflict with or detract from it.

The recently released Bristol Bay Area Plan for State Lands documents a variety of land uses that could potentially occur on lands surrounding Katmai. Lands adjacent to Katmai are used for fish and wildlife habitat and for recreational, subsistence, and commercial activities. The landownership patterns around Katmai consist primarily of state-selected lands and lands in federal ownership (U.S. Fish and Wildlife Service and Bureau of Land Management). A few tracts abutting the park, preserve, and wild river corridor are native-selected or conveyed lands.

Programs and activities on adjacent lands that could affect Katmai include proposed oil and gas exploration and development in Shelikof Strait and Bristol Bay, upland leasing for oil and gas exploration, mineral exploration and development, proposed trans-peninsula pipeline corridors, regional transportation corridors, aquaculture proposals in Cook Inlet and Bristol Bay, land disposal and subdivision, commercial fishing, sportfishing, sport hunting, and subsistence activities.

Past Acquisition Activities

Number of tracts of land acquired: 0

Number of tracts acquired through condemnation or declaration of taking: 0

Number of land easements acquired: 0

Number of improvements acquired: 0

Present acquisition ceiling: None

Amount of funds appropriated for acquisition: 0

Sociocultural Characteristics

There are two very general patterns in the relationship between the private lands in the park, preserve, and wild river corridor and their local sociocultural context. Most of the small tracts are owned or claimed by local people who now or in the past have used these sites as a part of their subsistence lifestyle. Although commercial fishing in Bristol Bay dominates activities in the summer months and is the mainstay of the regional economy, activities during much of the remainder of the year focus on trapping, hunting, or subsistence fishing. Other privately owned lands in the unit support the rapidly growing visitor-service industry. Several operations are long-established businesses with complex infrastructures; others are new and actively attempting to expand their clientele. Significantly, some small tracts in the first category are being converted to commercial visitor use establishments, and this trend is expected to continue for some time.

LAND PROTECTION ALTERNATIVES

Land Protection Laws and Authorities

Federal Authorities. Mining activity in areas of the national park system is governed by PL 94-429 as implemented through regulations in 36 CFR 9A.

Affirmative responsibilities for the preservation of cultural resources by federal agencies is established by Executive Order 11593 (Protection and Enhancement of the Cultural Environment, May 13, 1971) and PL 96-515, section 110 (National Historic Preservation Act of 1966, as amended, December 12, 1980). Agencies are directed to identify, consider, preserve, and positively use cultural resources to achieve the following objectives:

Foster conditions, through measures including financial and technical assistance, under which our modern society and our prehistoric and historic resources can exist in productive harmony and fulfill the

social, economic, and other requirements of present and future generations.

Provide leadership in the preservation of the prehistoric and historic resources of the United States and of the international community of nations.

Administer federally owned or controlled prehistoric and historic resources in a spirit of stewardship for the inspiration and benefit of present and future generations.

Contribute to the preservation of nonfederally owned prehistoric and historic resources and provide encouragement to organizations and individuals undertaking preservation by private means.

Encourage the public and private preservation and compatible use of historic structures.

Assist state and local governments and the National Trust for Historic Preservation to expand and accelerate their historic preservation programs and activities.

Section 106 of the National Historic Preservation Act of 1966, as amended, requires federal agencies to take into account the effects of federally assisted undertakings on properties listed on or eligible to be listed on the National Register of Historic Places, and to give the Advisory Council on Historic Preservation an opportunity to comment on such undertakings.

The Archeological and Historic Preservation Act of 1974 (PL 93-291, 16 USC 460) calls for the preservation of historic and archeological materials and data that would otherwise be lost as a result of federal construction or federally licensed or aided activities. Data recovery or in situ preservation is available to the secretary.

The Archeological Resources Protection Act of 1979 (PL 96-95, 16 USC 470aa) further protects historic, prehistoric, and archeological properties on federal and Indian lands by providing criminal and civil penalties against unauthorized use and destruction of those properties.

The Coastal Zone Management Act (PL 92-583, as amended in 1976 and 1980) establishes a national policy and develops a national program for the management, beneficial use, protection, and development of the land and water resources of the nation's coastal zones. While this act establishes national goals for coastal zones, it also provides substantial state discretion in interpreting and achieving its goals. The Alaska state program has been approved by the Office of Coastal Zone Management, and federal activities affecting the state's coastal zone are to be consistent with the state program. The provision applies not only to federal construction, but also to permits, licenses, and grants. Most activities on federal lands are exempt from these consistency requirements.

A coastal management program has been approved for the Bristol Bay Coastal Resource Service Area, which encompasses the Alagnak Wild River

and most of Katmai. Its goal is to achieve wise use of the land and water resources of the coastal area, balancing ecological, cultural, and economic values so as to maintain and protect coastal resources for the beneficial use and enjoyment of this and future generations. Activities occurring on federal lands that directly affect state coastal resources are subject to federal consistency determinations. The program's objectives most related to the mission of Katmai and the protection of its resources are as follows:

Ensure that development activity occurs in a manner that has no, or minimal, impact on important fish and wildlife populations.

Encourage the development of community land use planning efforts so that they may expand in a careful manner; avoid the creation of new communities.

Ensure that state, federal, and native lands made available for private development are thoroughly evaluated and shown to be physically capable of supporting the intended use.

Identify areas of high recreational value and use, and ensure that these areas retain the unique qualities that resulted in their identification.

Ensure that public access to recreational areas is maintained.

State and Local Authorities. The Anadromous Fish Act (AS 16.05.870) provides protection to specific rivers, lakes, and streams or sections of them that are important for the spawning, rearing, or migration of anadromous fish. A number of water bodies in the unit, including Brooks River, the Alagnak River, and the Nonvianuk River, are designated anadromous fish streams that are specifically protected by this act. The act requires any person or governmental agency that desires to construct a hydraulic project, or to use, divert, obstruct, pollute, or change the natural flow or bed of a specified river, lake, or stream, or to use wheeled, tracked, or excavating equipment or log-dragging equipment in the bed of a specified river, lake, or stream to notify the commissioner of the Department of Environmental Conservation of this intention before beginning the construction or use.

Alternative Means of Land Protection

Potential methods of land protection include cooperative agreements, Alaska Land Bank, coordination with other agencies, zoning, regulation, less-than-fee acquisition or easement, and fee-simple acquisition. All of these methods can be used in any combination. Each alternative would provide some degree of protection to the ecological, cultural, wilderness, and recreational values of Katmai's federal and nonfederal lands. The application, sociocultural effects, and potential effectiveness of each alternative is considered below.

Cooperative Agreements. A cooperative agreement is a written description of how two or more parties will take certain actions. An

agreement can provide for the exchange or transfer of services, funds, or benefits. Some of the elements that could be addressed in an agreement for land protection include

- access for resource management activities
- routine maintenance or restoration
- enforcement of resource protection laws
- other law enforcement
- joint review of permit applications
- interpretive services

Advantages of cooperative agreements include their flexibility, relatively low cost, and ability to establish cooperative arrangements for management. Disadvantages include procedural requirements, the ability of one party to terminate the agreement on short notice, and lack of permanent protection.

Specific effects would depend upon the terms of the agreement. Because by definition most of the interested parties would agree with its terms, it is unlikely that a cooperative agreement would have any negative or adverse effects.

Agreements are likely to be most effective for lands owned by entities other than individuals. These include corporations, state or local governments, federal agencies, and nonprofit organizations. Agreements are more likely to be workable with these groups than with individuals because organizations often have the necessary staff, equipment, and financial resources to develop a worthwhile agreement in the first place and then to carry out the terms of the agreement over a long period of time.

Cooperative agreements are appropriate when both parties have similar or compatible management objectives. They can be used as interim protective measures when long-term goals cannot be immediately achieved. The expenditure of federal funds to provide permanent facilities under potentially short-term cooperative agreements is generally prohibited.

Alaska Land Bank. Section 907 of ANILCA established the Alaska Land Bank program to provide legal and economic benefits to native landowners and to provide for the protective maintenance of nonfederal lands, particularly where the lands relate to conservation system units. Land bank agreements may contain provisions such as the landowner's responsibility to manage land in a manner compatible with the planned management of the unit. The superintendent's responsibility is also defined. It may include technical and other assistance such as fire management, trespass control, resource and land-use planning, and other services, with or without reimbursement as agreed upon by the parties involved. Native corporation lands (but not native allotments or small patented tracts) would be immune from adverse possession, real property taxes, and assessments when included in the land bank. They would also be immune to judgment in any action of law or equity to recover sums owed or penalties incurred by any native corporation or group or any officer, director, or stockholder of the corporation or group. Land bank agreements may be particularly important in cooperating with native

corporations that own large tracts of land in and adjacent to conservation system units. Sociocultural impacts and effectiveness are essentially the same as for cooperative agreements.

Coordination with Other Agencies. Actions by federal and local agencies to permit, license, or provide financial assistance may have significant effects on resources of the park, preserve, or wild river corridor. Under provisions of the National Environmental Policy Act, major federal actions are subject to public review processes to ensure adequate consideration of possible effects on the environment. The coastal zone management program also provides opportunities for review of permitting and funding activities that may have a significant effect on resources of the park, preserve, or wild river corridor. Actions of special concern include federal grants, loans, and loan guarantees for new development, road improvements, pipeline and utility corridors, sewage treatment facilities, and solid waste disposal.

As a concerned neighbor and land manager, the National Park Service can help ensure that other agencies are fully aware of any effects that proposed actions may have on resources of the park, preserve, or wild river corridor. Participation in public hearings and review processes is one means of expressing park concerns. Coordination also may be aided by memorandums of understanding or by requesting that the park be notified in advance when certain actions are being considered. Participation by the park in project or permit review processes will help encourage the most compatible design, location, and operation of new developments.

Zoning. Within units of the national park system, local zoning regulations can be used to limit the density, type, location, and character of development. Zoning should be considered in the following cases:

The local government has a zoning ordinance in place or is willing to adopt one.

There is evidence of state and local support for the protection of park values.

Some private uses of the land are compatible with the protection of park values.

Private use of land must be controlled and managed rather than excluded to meet park objectives.

The adoption of zoning regulations that have been developed with public involvement may prevent individual landowners from using their land in some ways. However, this restriction on individual freedom results in benefits to the community as a whole.

The value of local zoning as a long-term land protection tool is restricted by the potential for changes in local governing bodies, political pressures on decision-making, and difficulties in its enforcement.

Regulations. Regulatory controls stemming from authority vested in federal, state, and local governments may be available to help protect park resources. For example, federal, state, and local regulations often impose strict limits on dredging or filling of wetlands that would destroy wildlife habitat or degrade water quality. Local subdivision and environmental regulations may restrict residential development that is not adequately served by water and sewage-treatment facilities. Regulations are most useful for modifying the nature, level, and duration of activities.

Although with adoption of regulations, developed with public involvement, individual landowners may be prevented from using their land in some ways. This restriction on individual freedom results in benefits to the community as a whole.

Where the impact of development is already evident, regulations are more likely to be effective in reducing the adverse effects of major projects. In relatively pristine areas, regulations may be of little use in preserving natural systems from any intrusion or development. Regulations are also more likely to be effective where there is a good base of information about the effects that certain activities will have on park resources.

Title 36 of the Code of Federal Regulations provides guidance and controls for public use and recreational activities in national park system units. Although some of the regulations apply to nonfederal lands and waters, they are generally applicable only in parks where the National Park Service has exclusive or concurrent jurisdiction (that is, where the state has ceded enforcement authority to the federal government). Thus, the CFR regulations do not provide land protection to nonfederal lands in Katmai National Park and Preserve or to the Alagnak Wild River.

Easements. Landownership may be envisioned as a package of rights. An easement conveys some of the rights from one owner to another, while the rest of the rights of ownership remain unchanged. Easements are most useful in the following cases:

Some, but not all, existing or potential private uses of the land are compatible with the protection of park resources.

The owners desire to continue their occupancy and current uses of the land under terms specified by the National Park Service.

Scenic values, resource protection, or access by the public or the National Park Service is necessary only over a portion of the land.

Easements may be used to convey a right of access, ensure the preservation of scenic values, maintain existing land uses, or limit existing or potential uses. Terms of an easement depend upon the resource of concern, the topography, and the current or potential use and development of a specific tract.

For example, the provisions of an easement to protect park resources might address the following points: clearing of vegetation; density, height, and design of new structures; and access by the National Park Service for management of natural and cultural resources.

Individual and cumulative effects of easements would depend upon the rights acquired. Overall, effects would likely be beneficial, since the easements would contribute to the protection of ecological, cultural, wilderness, and recreational values of the park, preserve, and river corridor.

On large tracts the development of specific terms for easements would require detailed site planning to identify the most environmentally sensitive areas as well as the areas where development might be accommodated with minimal effects. Specific terms can be cooperatively agreed upon to ensure that development follows traditional patterns of land use and avoids any unnecessary disturbance of the natural system.

Because easements are enforceable property rights, they are binding on future owners and thus provide greater assurance of permanent protection than do agreements or zoning ordinances. Advantages of easements include the following:

- Private ownership and use may continue subject to the terms of the easement.

- Initial costs may be lower than for fee acquisition, thus permitting the protection of more land.

- Local property taxes are less affected than with fee acquisition.

Disadvantages of easements rather than fee acquisition include the following:

- Easement terms are potentially difficult to enforce.

- Landowners may be unfamiliar with less-than-fee ownership, resulting in frequent violations of the terms of the easement.

- It is relatively expensive to acquire undeveloped properties where any development would be incompatible with park values.

- The terms and conditions of the easement would be costly to monitor to ensure compliance.

Fee Acquisition. When all of the interests in the land are acquired, it is owned in fee simple. Fee acquisition may be recommended when other methods are inefficient or inadequate to meet land protection needs. Fee acquisition is most often appropriate in the following cases:

- The land is owned by individuals who are not willing to sell a less-than-fee interest.

- The land must be maintained in a natural condition that precludes private use.

- Resources of concern cannot be protected by alternative methods, or the alternatives would not be cost-effective.

The land is needed for the development of park facilities or for intensive public use.

Fee acquisition could significantly affect the individuals involved. Residents would be dislocated unless their right of use and occupancy was reserved.

Fee-simple acquisition is the most effective and secure method of land protection, although it is also generally the most expensive method in the short term. Over the long term, however, savings and benefits may be greater than with other methods. Fee acquisition includes the following advantages:

NPS control over human activities and resource use on the tract is permanent.

Full access and development can be provided where needed.

Private use and occupancy may continue where reserved.

Landowners are familiar with fee-simple ownership.

Cost of operation is lower than with easements.

The following disadvantages may be associated with fee acquisition:

The initial cost of acquisition may be high.

Residents may be displaced, unless they reserve use and occupancy rights, and the local property tax base may be reduced.

Special restoration efforts may be required, especially for developed land.

Summary of Protection Methods. Because of the diversity of lands and resources in the park, preserve, and river corridor, no single method is adequate and cost-effective in every land protection situation. A combination of methods is likely to be more useful in ensuring that land uses within and adjacent to the park, preserve, and river corridor are compatible with the protection of park values.

The major consideration in selecting appropriate land protection methods is the need for compliance with the intent of the congressional legislation, executive orders, and proclamations that established the park, preserve, and wild river corridor. These authorities emphasize the preservation and protection of the unit's ecological, cultural, wilderness, and recreational values, and the National Park Service will in all cases seek the land protection needed to fulfill this obligation. In some cases, fee acquisition may be necessary and justified to protect key resources essential to the purpose of the park or to best provide for long-term public use or resource management. Scenic easements may be effective in protecting the unit from incompatible development that would impair resources and detract from the visitor's experience.

Cooperative agreements with state agencies responsible for land management within the unit may ensure that the use of those lands will be consistent with park purposes. Although regulations are not a substitute for the acquisition of land interests, the National Park Service will take advantage of opportunities to use regulations to maintain existing land uses and environmental quality within the park, preserve, and wild river corridor.

Methods of Acquisition

There are four primary methods for acquisition of fee and less-than-fee interests in lands: donation, exchange, purchase, and relinquishment.

Donation. Landowners may be willing to donate their land or certain property rights in order to achieve conservation objectives. The tax benefits of donation may be an important consideration. Donations of fee are deductible from taxable income. Although subject to Internal Revenue Service requirements, easement donations may also be deductible.

Landowners are encouraged to consult their accountants or tax consultants to discuss in detail the advantages of donations. NPS representatives may be able to provide some general examples of tax advantages.

Exchange. Land or interests in land may be acquired by exchange. The land to be exchanged must be located within Alaska and must be of approximately equal value. Cash payments may be made for differences in value.

The National Park Service will also consider an exchange for other federal lands within the unit boundary in order to consolidate ownerships into more manageable units.

Other federal lands in Alaska that are surplus to agency needs would normally go through disposition procedures, including public sale. The National Park Service will work with the Bureau of Land Management and the General Services Administration to identify federal lands that may be available for exchange purposes.

Purchase. The acquisition of land by purchase requires that funds be appropriated by Congress or donated from private sources. Donations of funds or purchases of land by individuals or organizations interested in holding land for conservation purposes will be encouraged.

Relinquishment. State and native corporation lands that are under application may be relinquished, resulting in ownership by the National Park Service. The relinquishing entity can use the allocation for acreage being relinquished to acquire other lands outside the unit.

RECOMMENDATIONS

The recommended means of land protection for nonfederal lands in Katmai National Park and Preserve and the Alagnak National Wild River are listed in priority order below, and the locations are shown on the Land Status and Protection Priorities map. Owners or applicants, acreages involved, minimum interest needed for protection, justification, and proposed method of acquisition are also given. It should be noted that priorities may be readjusted if incompatible uses or hardship needs arise.

The actual means of acquisition of land or interests in land may change through negotiation. If acquisition is appropriate, an exchange of land is the preferred method. Donation of land will be encouraged. Acquisition by purchase will be limited by a scarcity of land acquisition funds. Condemnation is usually avoided, although it may be used in emergencies to prevent imminent land use activities that would severely damage the integrity of unit values.

Priority 1

<u>Tract</u>	<u>Serial No.</u>	<u>Owner/Applicant</u>	<u>Acres</u>
A	A 063967	State of Alaska	17,040
	A 063968	State of Alaska	12,645
	A 063970	State of Alaska	17,842
	A 063971	State of Alaska	3,447
		State of Alaska	17,280
		State of Alaska	7,040
B	AA007604	Melgenak	120
C	AA025641	Pfaff	-
	AA025642	Pfaff	-
	AA025643	Pfaff	-
D	A 001276	Russian Orthodox Church	14
	A 001278	Russian Orthodox Church	5

Analysis. Katmai National Park and the McNeil River State Game Sanctuary, located adjacent to the park, form the largest sanctuary in existence for Alaskan brown bears. However, bears that seasonally use the 49,770-acre area of state-owned land in tract A inside the park boundary are subject to sporthunting, as are bears that use approximately 25,524 acres of state-owned lands located between McNeil and Katmai. Although the lands are currently undeveloped and are wilderness in character, they are not in designated wilderness and are subject to disposal by the state and to subsequent subdivision and development. There are several unnamed but designated anadromous fish spawning streams in the area.

The Brooks Camp area, encompassed by tract B, has the most intensive overnight visitor use in the park. The lodge, located at the mouth of Brooks River, is the largest lodge in the park and is thus of great public

use value. Visitor activities in the Brooks Camp area include viewing the magnificent lake and mountain scenery and fishing for rainbow trout and salmon. The area also provides unique opportunities to view and photograph brown bears in their natural environment as they concentrate to feed on salmon in Brooks River. Brooks River is a designated anadromous fish spawning stream.

Three lode claims in tract C, located northeast of Battle Lake, are currently undergoing validity determination. If the claims are determined to be valid, their development would be subject to NPS approval of a plan of operations that would have to address the following concerns:

- possible irreparable disturbance of the vegetation cover on the steep slopes

- disturbance of bears by helicopters or surface vehicles transporting ore from the mine (the claim site is in a major bear denning area and is immediately adjacent to McNeil River State Game Sanctuary)

- expansion of the airstrip or development of access roads that could disrupt drainage patterns, accelerate erosion, and increase runoff and sediment loads

- possible degradation of water quality in areas important for fish spawning, recreation, or subsistence activities due to ore extraction or processing (the site is located in the headwaters of the Alagnak River, a designated anadromous fish spawning stream)

Operations likely to cause any of these effects would not be approved by the National Park Service.

Tract D consists of three parcels located on the coast at Katmai Bay, Kukak, and Kaguyak, and all are patented to the Russian Orthodox Church in America. Known archeological and historical resources on or near the Kukak and Kaguyak parcels are of National Register quality. The Kukak parcel is bounded by a designated anadromous fish stream. All three parcels are in designated wilderness and are currently undeveloped. Potential uses include the construction of public facilities or facilities related to offshore oil and gas development. Such development would be incompatible with the preservation of natural, cultural, and wilderness values.

Minimum Interests Needed. The National Park Service will seek to acquire in fee tract A through a land exchange to ensure wildlife protection. The claim for tract B is currently in litigation; if it is conveyed, the National Park Service will seek fee acquisition. To prevent the unacceptable impacts that may result from mining operations, the National Park Service will seek fee acquisition of tract C. To preclude commercial development and loss of cultural resources on tract D, the Park Service will seek to acquire the parcels in fee.

Priority 2

<u>Tract</u>	<u>Serial No.</u>	<u>Owner/Applicant</u>	<u>Acres</u>
E	A 030370	Katmailand, Inc.	80
	A 032491	Katmailand, Inc.	4
	A 032492	Katmailand, Inc.	2
	A 032493	Katmailand, Inc.	11
	AA008301	Richard Matthews	54

Analysis. The patented parcels in tract E are the sites of lodges on Battle Lake, Nonvianuk Lake, Kulik Lake, and Enchanted Lake. The Kulik Lake site consists of two parcels, one with a lodge and one on which an airstrip for wheeled aircraft is partially situated. Northern Consolidated Airlines, now Wien, sold the parcels at Battle, Nonvianuk, and Kulik lakes to Katmailand, Inc. Edwin Seiler sold most of the site at Enchanted Lake to Richard Matthews during the winter of 1983-84.

The lodges are used primarily as bases for sportfishing activities. The lodges at Battle, Kulik, and Nonvianuk lakes are situated along designated anadromous fish spawning streams. Enchanted Lake lodge is in designated wilderness, and the lodges at Nonvianuk Lake and Kulik Lake are adjacent to designated wilderness. Because the parcels are small, any land use activities on them would likely affect adjacent lands.

The proposed general management plan for Katmai identifies these privately owned lands as having the potential for moderate increases in overnight public facilities, consistent with resource capacities of the sites and their surroundings.

Minimum Interest Needed. The National Park Service will seek cooperative agreements with the landowners to manage the lands in a way that is compatible with park values. If an incompatible use such as a subdivision is proposed, the National Park Service will seek fee acquisition of the involved parcel.

Priority 3

<u>Tract</u>	<u>Serial No.</u>	<u>Owner/Applicant</u>	<u>Acres</u>
F	AA006669	Igiugig Village Corporation	33,510
	AA 19427	Bristol Bay Native Corporation	3,635

Analysis. Part of this tract, located on the southwest side of Kukaklek Lake, has been interimly conveyed to the Igiugig Village Corporation. There is a 50-foot-wide easement from the lakeshore to the preserve boundary, as well as a 1-acre easement at the foot of the lake. The Alagnak River begins on the tract, flowing out of Kukaklek Lake. Downstream from the preserve boundary, it is a designated national wild river. The river is also a designated anadromous fish spawning stream. Nanuktuk Creek also is a designated anadromous fish spawning stream, and a significant concentration of brown bears occurs along the lower segment of the stream, which is located on this tract.

There is currently no development on these parcels. Sporthunting takes place in accordance with state regulations. Access is by floatplane or in winter by all-terrain vehicle, snowmachine, or wheeled aircraft that land on frozen lakes.

Minimum Interest Needed. An exchange of these lands, which would involve Igiugig, Bristol Bay Native Corporation, the state, and the National Park Service, has been proposed, and the Park Service will participate in discussions concerning it. Meanwhile, the Park Service will seek inclusion of these parcels in the Alaska Land Bank to ensure protection of healthy wildlife populations, fish-spawning habitat, and other resource values. The state of Alaska will be encouraged to monitor fish and wildlife populations on these lands.

Priority 4

<u>Tract</u>	<u>Serial No.</u>	<u>Owner/Applicant</u>	<u>Acres</u>
G	AA006141	Kihle, Ronald	155
	AA005843	Malone, Olga	130
H	AA002924	Dagg, Gene	77
I	AA007964	Blatchford, Irene	161
	AA006203	Groat, Guy, III	100
	AA006204	Groat, Ruth	140
	AA006283	Herrmann, Gerald	80
	AA006276	Herrmann, Henry	134
	AA007907	Monsen, Annie	160
	AA007963	O'Neill, Michael	97
	AA006212	Peters, Pamela	150
	AA007906	Reeves Zimin, Muriel	120
	A 059269	Trefon, Alex, Jr.	80
	AA006738	Trefon, Barbara Ann	160
	AA002021	Hiles, John	5
	AA002615	Paddock, Diane	5
J	AA006038	Anagasan, Trefon	160
	AA007903	Chukan, Anna	160
K	AA005956	Chukan, Paul	130
L	AA045095	Chukwak, Zacker	200
M	AA007839	Able Setuk, Katherine	130
	AA043702	Apokedak, Ida	120
	AA043701	Apokedak, Nick	160
	AA043705	Apokedak, Patricia	40
	AA006099	Estrada, Agnes	157
	AA043703	Gust, Andrew	80
	AA006463	Knutsen, John	160
	A 062335	McCormick, Anisha	70
	AA007842	Peterson, Barbara	160

	AA006608	Peterson, Edwin	125
	AA053081	Tallekpalek, Anthony	159
	AA044180	Tallekpalek, John	158
	AA044066	Tallekpalek, Mary	80
	AA008059	Wilson, Alma	100
	AA006736	Wilson, Annie	160
	AA006464	Wilson, Bertha	70
	A 054752	Wilson, Charles	155
	AA006471	Wilson, William	160
	AA006472	Woods, Sassa	40
N	A 052511	Olympic, Mary	160

Analysis. Tract G consists of allotment applications by Ronald Kihle and Olga Malone for several parcels in the upper Brooks Lake drainage. Several of the parcels are located adjacent to ponds, on which floatplanes can land, while others are located along Headwaters Creek, which is a designated anadromous fish spawning stream. Although there are cabins on two of the parcels, all of the parcels are in designated wilderness. The habitat is used by bears and caribou. The state considers it essential spring habitat and important year-round habitat for moose.

Tract H consists of an application for an allotment on a small island in Naknek Lake. The island is used by gulls and other birds for nesting, and it is located on the route along which most visitors fly into the park. The island is currently undeveloped and wilderness in character.

Tract I consists of a number of allotment applications, located on the moraine west of Naknek Lake, several of which have been approved or patented. Several parcels are situated along the Naknek River, which is a designated anadromous fish spawning stream. Some of the parcels are accessible by road from the towns of King Salmon and Naknek. Residential, commercial, or recreation cabins have been constructed on several parcels. The area is inhabited by moose and brown bears, and sporthunting takes place on private lands in the area. Any improper refuse disposal on these lands would attract bears from surrounding areas; consequent destruction of bears in defense of life and property would affect the natural condition of the bear population on adjacent park lands.

The two parcels of tract J are in designated wilderness and are adjacent to tract I.

Tract K consists of one allotment application on the north shore of Naknek Lake. Although it is not in designated wilderness, and there are cabin ruins on the parcel, the area is wilderness in character. The parcel is adjacent to a designated anadromous fish spawning stream, and the area is inhabited by moose and brown bears.

Tract L consists of one allotment application adjacent to a pond south of the Nonvianuk River. The parcel is in designated wilderness, and the area is inhabited by moose and brown bears.

Tract M consists of a number of allotment applications, several of which have been approved or patented. They are located along the Nonvianuk and Alagnak rivers. These rivers are designated anadromous fish spawning streams, and the designation of the Alagnak as a national wild river reflects its recreational and wilderness values. Several historic cabins and other structures are located along the rivers.

Tract N consists of one parcel located west of Kukaklek Lake, on the boundary of Kàtmai National Preserve. The area is inhabited by moose and brown bears.

Minimum Interests Needed. The National Park Service will seek conservation easements on any allotments that are approved on tracts G, K, L, or N to preclude subdivision or other activities that would adversely affect the integrity of resources on adjacent lands. In the interim the Park Service will seek to cooperate with the landowners in managing the lands to protect resource values.

Although the allotment application for tract H has been rejected, in the event that it is reinstated and approved, the Park Service will seek fee acquisition to ensure protection of wilderness values.

The Park Service will seek conservation easements on the parcels in the Lake Camp area (tract I) to preclude activities that are likely to affect the integrity of resources on adjacent lands. In the interim the Park Service will seek to cooperate with landowners in managing the lands to protect ecological and recreational values.

Because the allotments in tract J are in designated wilderness, the Park Service will seek to acquire scenic easements as well as conservation easements on the parcels to protect resource integrity and to ensure that any structures that are built do not detract from the wilderness view along the Naknek River and from the west end of Naknek Lake.

The Park Service will seek conservation easements on the parcels along the Alagnak and Nonvianuk rivers (tract M) to preclude subdivision or other activities that would adversely affect the wilderness character of the area or the integrity of resources on adjacent lands. In the interim the Park Service will seek to cooperate with landowners in managing the lands to protect ecological, cultural, wilderness, and recreational values.

Priority 5

<u>Tract</u>	<u>Serial No.</u>	<u>Owner/Applicant</u>	<u>Acres</u>
O	AA006680	Paug-vik, Inc., Ltd.	11,011
	AA006747	Qinuyang, Ltd.	1,160

Analysis. These native village corporation selections are located on the moraine west of Naknek Lake, both north and south of the Naknek River. Parts of the selections have been interimly conveyed. The area is inhabited by moose, brown bears, and occasional caribou, and

sport hunting takes place on the selections. The Naknek River is a designated anadromous fish spawning stream. There are several active gravel pits west of this area. The area is traversed by a road used for public access to Naknek Lake and small tracts of private land. A lake in the area is used by the public for floatplane landings, particularly when weather precludes landing on more exposed waters. Some subdivision and commercial development of the area has already occurred.

Although the current boundary along the moraine is an ecological boundary that encloses the entire upper Naknek drainage, a boundary change has been proposed that would exclude this area from the park. Such a boundary change would require congressional legislation.

Minimum Interest Needed. The National Park Service will continue discussions concerning the proposed boundary change. Meanwhile, the Park Service will seek an agreement to include the land in the Alaska Land Bank to ensure protection of healthy wildlife populations, fish-spawning habitat, and other recreational and resource values.

Priority 6

Analysis. The state of Alaska has title to submerged lands beneath navigable waters in the state. In Katmai the Bureau of Land Management has determined that Naknek River, as well as Naknek Lake west of the pre-1969 boundary (tract P), are navigable. The Alagnak and Nonvianuk rivers are currently undergoing navigability determination. Each of these water bodies is a designated anadromous fish spawning area, and the state plans to close them to mineral entry.

Minimum Interest Needed. The National Park Service will seek a cooperative agreement with the state to ensure protection of water quality, spawning habitat, and healthy populations of fish and wildlife that use these aquatic or associated riparian habitats.

Priority 7

Analysis. The boundary of Katmai National Monument was extended in 1941 to include the Shelikof Strait coast and all islands within 5 miles of the coast (tract Q) in order to protect populations of seabirds and sea mammals, as well as other coastal resources. Although the boundary of Katmai National Park is at mean high tide line, and the state owns the intertidal and submerged lands, the coastal terrestrial community is strongly interrelated with the intertidal and marine communities. Although the waters within the 5-mile limit are used for commercial fishing, the coastline is undeveloped, and enclosed bays such as Kukak Bay and Geographic Harbor in particular are wilderness in character.

Minimum Interest Needed. The National Park Service will seek to cooperate with the state in managing the offshore area to preserve its ecological and wilderness values, as well as the integrity of terrestrial resources on adjacent lands. The National Park Service will also encourage state designation of Kukak Bay and Geographic Harbor as marine sanctuaries.

Priority 8

<u>Tract</u>	<u>Serial No.</u>	<u>Owner/Applicant</u>	<u>Acres</u>
R	AA019431 AA019432	Bristol Bay Native Corporation Bristol Bay Native Corporation	955

Analysis. The parcels in tract R, located in the northeast corner of the preserve, have been interimly conveyed with subsurface rights. The tract is located in the headwaters of the Alagnak River drainage. Both the Alagnak River and Funnel Creek, immediately downstream from the tract, are designated anadromous fish spawning streams. The tract is in an area identified as having relatively high mineral potential.

Minimum Interest Needed. The National Park Service will seek an agreement to include these lands in the Alaska Land Bank to ensure protection of healthy wildlife populations, fish-spawning habitat, and other resource values. In the interim, the Park Service will seek to cooperate with the landowner to protect resource values.

Priority 9

<u>Tract</u>	<u>Serial No.</u>	<u>Owner/Applicant</u>	<u>Acres</u>
S	AA006678	Levelock	±640

Analysis. Tract S, a selection by the Levelock Village Corporation, is located near the west end of the Alagnak Wild River.

Minimum Interest Needed. If the selection is conveyed, the National Park Service will seek acquisition through relinquishment by Levelock. In the interim the Park Service will seek to cooperate with the landowner in managing the land to protect resource values.

NEPA COMPLIANCE CONSIDERATIONS

In accordance with ANILCA, section 910, proposed actions of the "Land Protection Plan" involving land exchanges with native village and regional corporations are excluded from National Environmental Policy Act (NEPA) requirements. The proposed land exchanges and cooperative agreements with Igiugig, Paug-vik, Qinuyang, and Bristol Bay native corporations, and the proposed relinquishment of selections by the Levelock Village Corporation, therefore do not require NEPA compliance.

Other actions proposed in the "Land Protection Plan" would cause no significant change in existing land or public use and are therefore categorically excluded from NEPA considerations, in accordance with the U.S. Department of the Interior implementing procedures (516 DM 6, appendix 7.4, and 516 DM 2, appendix 2). Proposed actions for small tracts and submerged state lands are included in this category.

WILDERNESS SUITABILITY REVIEW

With passage of ANILCA, Congress formally designated 3,425,810 acres of Katmai National Park and Preserve as wilderness. The Wilderness Act of 1964 defines wilderness as follows:

A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Wilderness areas are to be managed under the provisions of the 1964 Wilderness Act, except as otherwise expressly provided for in ANILCA. The Wilderness Act states that wilderness areas "shall be administered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness." ANILCA, section 1110(a), provides that in wilderness areas,

the use of snowmachines . . . motorboats, airplanes, and nonmotorized surface transportation methods for traditional activities (where such activities are permitted by this Act or other law) and for travel to and from villages and homesites [shall be permitted]. Such use shall be subject to reasonable regulations by the Secretary to protect the natural and other values of the conservation system units, . . . and shall not be prohibited unless, after notice and hearing in the vicinity of the affected unit or area, the Secretary finds that such use would be detrimental to the resource values of the unit or area.

The National Park Service has incorporated this provision into the Code of Federal Regulations (36 CFR 13), which covers the administration of national park system units in Alaska (see appendix A).

Airplanes and motorboats are used to gain access to designated wilderness. The continued use of these forms of motorized equipment is allowed under the above cited sections of ANILCA and the federal regulations. Helicopter landings are prohibited on park/preserve lands except in compliance with a permit issued by the superintendent. No other forms of motorized access are permitted except as provided by ANILCA, sections 1110 and 1111.

The Wilderness Act, section 4(c), states that subject to existing private rights there shall be

no commercial enterprise and no permanent road within any wilderness area . . . and except as necessary to meet minimum requirements for the administration of the area for purposes of this Act (including measures required in emergencies involving health and safety of persons within the area), there shall be no temporary road . . . and no structure or installation within the area.

Section 1303(a)(3) of ANILCA, however, authorizes the use and occupancy of existing cabins or other structures in national park system units by means of permits. Cabins and other structures not under a permit system may be used for official government business, for emergencies involving health and safety, and for general public use. Also under section 1303, the secretary may permit the construction and maintenance of cabins or other structures if he determines that the use is necessary to reasonable subsistence use. Section 1315 of ANILCA contains more specific language:

Previously existing public use cabins within wilderness . . . may be permitted to continue and may be maintained or replaced subject to such restrictions as the Secretary deems necessary to preserve the wilderness character of the area.

Section 1315 also allows the construction of new cabins and shelters if necessary for the protection of public health and safety. Appropriate committees of Congress must be notified of the intention to remove existing public use cabins or shelters or to construct new ones in wilderness.

Section 1310 provides, subject to reasonable regulation, for access to and the operation, maintenance, and establishment of air and water navigation aids, communication sites and related facilities, and facilities for weather, climate, and fisheries research and monitoring in wilderness areas.

Section 1316 provides that, subject to reasonable regulation, temporary shelters and facilities on lands open to the taking of fish and wildlife may be permitted. However, such use may be denied if the secretary determines, subject to adequate notice, that such facilities constitute a significant expansion of existing facilities or are detrimental to unit purposes, including wilderness character.

As the vast majority of Katmai National Park and Preserve is designated wilderness, a management plan for the area is essentially a wilderness management plan. Accordingly, wilderness management under the above cited mandates has been integrated with other aspects of visitor use and resource management for the park and preserve and is discussed elsewhere in this document.

WILDERNESS SUITABILITY

Mandates

Section 1317(a) of ANILCA directs that a review be made of the suitability or nonsuitability for preservation as wilderness of all lands within unit boundaries not so designated by the act. Section 1317(b) specifies that "the Secretary shall conduct his review, and the President shall advise the United States Senate and House of Representatives of his recommendations, in accordance with the provisions of sections 3(c) and (d) of the Wilderness Act." The review is to be completed by December 2, 1985. This suitability review meets the requirements of ANILCA. Actual recommendations on whether to designate suitable areas as wilderness will be made following approval of the general management plan. An environmental impact statement will be prepared as part of the wilderness recommendation process. The president is to make his recommendations to Congress by December 2, 1987.

Wilderness Suitability Criteria

Wilderness suitability criteria were developed that reflect the definition of wilderness contained in the Wilderness Act and the provisions of ANILCA specific to wilderness areas in Alaska. These criteria were applied to all nonwilderness lands in the park and preserve to determine their suitability for designation. These criteria relate to the physical character of the land and current land status. Other factors such as appropriateness for management as wilderness and state and local concerns with wilderness management will be considered when recommendations are prepared after the general management plan has been approved. The following criteria were used in determining the suitability or nonsuitability of areas for wilderness designation:

Land Status

Federal land - suitable

Federal land under application and cemetery and historic sites - unsuitable if conveyed out of federal ownership; suitable if retained in federal ownership

Federal land intermly conveyed or tentatively approved for selection - unsuitable

Patented land - unsuitable

Nonfederal ownership of mineral estate - unsuitable

Navigable streams and submerged lands - unsuitable

Mining Development

Sites of minor past activities and disturbance - suitable

Sites of major past and current activities - unsuitable

Roads and Off-road Vehicle Trails

Unimproved and unused or little used trails - suitable

Roads or trails improved by mechanical means and regularly used by motorized vehicles - unsuitable

Airstrips

Unimproved or minimally improved airstrips that are maintained by hand - suitable

Improved airstrips that are maintained by mechanical means - unsuitable

Cabins

Uninhabited structures (for example, hunter, hiker, and patrol cabins) - suitable

Structures inhabited as a primary place of residence - unsuitable

Size of Units

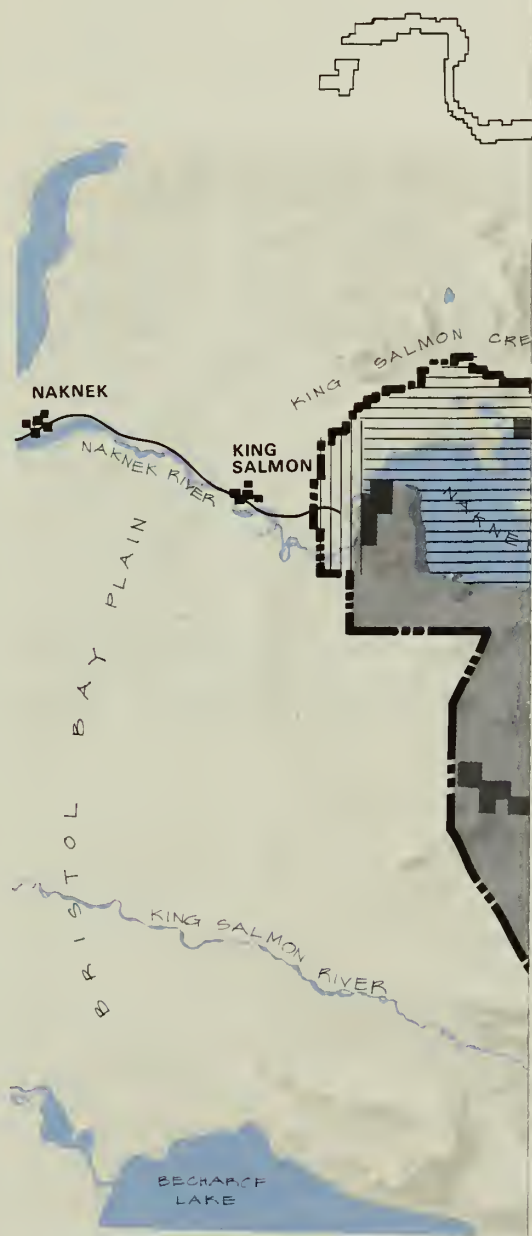
Areas greater than 5,000 acres, adjacent to existing wilderness, or of manageable size - suitable





Areas less than 5,000 acres or of unmanageable size - unsuitable

Lands Subject to Review

Of the approximately 4.1 million acres comprising Katmai National Park and Preserve, approximately 3.4 million acres were designated as wilderness by ANILCA. The remaining lands, consisting of approximately 667,500 acres, are subject to the wilderness suitability review required by ANILCA section 1317.

The affected federal lands covered by this review will be managed as wilderness until the president makes his recommendations to Congress. For recommended areas, such management will continue until Congress acts on the recommendations.



-  DESIGNATED WILDERNESS
-  SUITABLE FOR WILDERNESS
-  SUITABILITY PENDING
-  UNSUITABLE FOR WILDERNESS
-  PRESERVE BOUNDARY
-  PARK BOUNDARY
-  ALAGNAK RIVER BOUNDARY



WILDERNESS SUITABILITY

KATMAI NATIONAL PARK AND PRESERVE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

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- DESIGNATED WILDERNESS
- SUITABLE FOR WILDERNESS
- SUITABILITY PENDING
- UNSUITABLE FOR WILDERNESS
- PRESERVE BOUNDARY
- PARK BOUNDARY
- ALAGNAK RIVER BOUNDARY

↑ NORTH

0 5 10 15 MILES
0 5 10 15 20 KILOMETERS

WILDERNESS SUITABILITY

KATMAI NATIONAL PARK AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

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SUITABILITY DETERMINATION

For purposes of this review, those lands that will definitely remain in federal ownership and meet all of the other suitability criteria are considered suitable for wilderness designation. Those lands under selection, but that meet all the other suitability criteria, are suitable if retained in federal ownership and unsuitable if conveyed out of federal ownership. Lands in the latter category are shown as "suitability pending" on the Wilderness Suitability map. Suitable and unsuitable lands are also shown. A determination of suitability does not affect any pending selections or other prior existing land disposal actions.

Using the above criteria, 528,000 acres of federal lands within the park and preserve have been determined suitable for wilderness designation based on their present undeveloped and unimpaired state. With one exception there are no major past or current mining developments, improved roads or off-road vehicle trails, improved or maintained airstrips, or inhabited cabins on the federal lands subject to this review. The exception is the road from Brooks Camp to the Valley of Ten Thousand Smokes. This road corridor is not suitable for wilderness designation. In addition, there are approximately 109,500 acres of existing or potential nonfederal land within the park and preserve, and these lands are not suitable for wilderness designation. The final status of approximately 31,000 acres is uncertain at this time because land selections made under ANCSA and other authorities are still pending.

Changes in land status occurring or likely to occur between now and when wilderness recommendations are made to Congress will be reflected in those recommendations. All future wilderness recommendations will be made subject to valid existing rights.

ALAGNAK WILD RIVER MANAGEMENT

Section 605 of ANILCA designated the Alagnak River as a wild river under provisions of the Wild and Scenic Rivers Act (16 USC 1274(a)). The upper section of the Alagnak is included within Katmai National Preserve, but the lower portion is outside the boundary. Both sections are part of the national park system and are managed as a unit of Katmai National Park and Preserve.

Section 605 further directed that a study be conducted to establish a detailed boundary and to prepare a management plan for the area. This was completed in November 1983. A viewshed analysis was the primary consideration in determining the boundary (see the Management Plan for the Alagnak Wild River).

In the management of the Alagnak, the overall direction established for parkwide management will apply. Specific concerns that apply to the river and that are not addressed in other sections of this document are described below. A detailed analysis of the issues and management proposals is part of the Management Plan for the Alagnak Wild River. (Copies are available upon request from the Alaska Regional Office in Anchorage or from park headquarters in King Salmon.)

In 1984 approximately 150 people floated the river from Nonvianuk Lake, and an unknown number started from Kukaklek Lake. Given the current level of use and the mobile nature of visitors, there is no urgent need for a formal carrying capacity study at this time. Any indications of crowding on the river or adverse effects on the resource during the life of this plan will be addressed as they are identified.

Based on the use that the river now receives and the expectations of the users, little development is necessary to accommodate visitors. Besides the designation of a camping area and the construction of a food cache and pit toilet at the outlet of Nonvianuk Lake, the only action required will be the designation of campsites along the river to reduce adverse effects.

Trespass or camping on private lands could become a concern because of native allotment applications. The Park Service will provide visitors with information about camping areas and where private lands should be respected.

For the foreseeable future, recreationists will continue to use aircraft for access to the river. Local residents use skiffs for subsistence purposes in the summer and three-wheelers and snowmachines in the winter. Restrictions on motorized river use are not recommended.

A primary attraction of the Alagnak River is sportfishing. Harvest regulations are set by the Alaska Department of Fish and Game. Until the fishery resource of the Alagnak has been fully evaluated, no additional regulations of sport or subsistence fishing will be proposed.



THE ENVIRONMENT

NATURAL ENVIRONMENT

GEOLOGY

Volcanism is one of the principal geologic processes at Katmai. The high peaks of the park were formed by volcanic activity, and many are still active, occasionally emitting steam, smoke, ash, or lava. A major eruption or earthquake may occur at any time.

The Katmai area was largely unknown until June 1912, when Novarupta erupted with tremendous force and drew worldwide attention to this area. Enormous amounts of hot, glowing ash and pumice were ejected from Novarupta and associated fissures. Within minutes, more than 40 square miles of an adjacent valley was buried by volcanic deposits that may be as much as 700 feet thick. The eruption of Novarupta withdrew the foundation from beneath Mount Katmai, which subsequently collapsed and formed a large caldera.

While Novarupta became quiescent, many thousands of fumaroles (steam- and gas-producing vents) developed as the volcanic material that inundated the valley settled, cooled, and hardened. The vista in 1916 of the coalescing plumes of steam produced by these vents gave the valley its name--Valley of Ten Thousand Smokes. Cooling has reduced fumarolic activity, and today there are no active vents on the valley floor. Vegetation has begun to appear in a few sheltered places on the surface of the semiconsolidated ash flow, but most of the valley floor consists of a wide expanse of multihued rock and ash cut by an intricate pattern of deep narrow canyons, some of which are more than 100 feet deep but only 5 to 10 feet wide. Viewing and possibly hiking in the Valley of Ten Thousand Smokes is a primary objective of many park visitors.

MINERAL RESOURCES

Mineral and petroleum resources within the Katmai area have not been investigated other than through reconnaissance studies and local explorations. Only a small part of the park has been subject to detailed geologic study, and most information has been obtained from a few widely spaced reconnaissance-type traverses.

The presidential proclamation establishing Katmai National Monument in 1918, and further proclamations expanding the monument in 1931, 1942, 1969, and 1978, closed the park lands to entry for prospecting, mining, or other resource extractive activities. Before 1918 exploration within the monument was limited to prospecting for gold along the coastal area and near early travel routes. On the basis of existing information and past activity, the area does not appear to have high potential for metallic mineral production under current economic conditions.

The Alaska Peninsula petroleum province extends through the eastern part of the park area, and the Nushagak-Bristol Bay province underlies the western part. The Alaska Peninsula province produces oil and gas in

the Cook Inlet area north of the park. A 1959 study of the park area by the U.S. Geological Survey states that

studies do not rule out the possibility of producing oil from structural and stratigraphic traps in the Mount Katmai area but [we] believe in general that the area is not very promising. The entire region has been subjected to intense volcanic activity, and it is unlikely that favorable petroleum strata can be reached at practical drilling depths on most of the structures that would be drilled.

The extent of potential offshore petroleum or gas resources has not been established. The state of Alaska claims title to and issues subsurface mineral, petroleum, and gas permits for the submerged lands adjacent to Katmai. There are no outstanding permits on public record for submerged offshore lands. Several outer continental shelf leases are located in the northern portion of Shelikof Strait.

SOILS

Soils are important in assessing the development capacity of a site. Subsurface water flow and the ability of the soils to absorb sewage and other effluent are both critical factors. At high elevations soils are absent, and coarse rubble deposits or bare rock are present. In the mid to lower elevations and hilly areas, soils are silty and sandy volcanic ash over gravelly material, stony loam, cinders, or bedrock. Deep depressions in the foothill slopes contain fibrous peat soils with lenses of volcanic ash. Soils in valley bottoms and in depressions in moraine hills along the coast are deep fibrous or partially decomposed peat. There is no permafrost in these areas.

Deep, poorly drained loamy soils with thick, overlying peat mat and permafrost occupy lowlands in the Naknek drainage. Poorly drained, sandy to gravelly soils occupy outwash plains and foot slopes from the Naknek Lake area to the Ugashik Lakes. Well-drained, dark, loamy soils from fine ash occupy sites on rolling hills and outwash plains in the Bristol Bay lowlands and the western slopes of the Aleutian Range. Organic peat soils occupy depressions throughout the lowlands of the King Salmon/Naknek areas.

WATER RESOURCES

Water quality in all of Katmai's lakes and rivers remains essentially unaltered by man. Some bodies of water are heavily silted with glacial outwash sediments or volcanic ash. Others contain clear, unsilted water. Water levels in the larger lakes may vary seasonally by as much as 7 feet.

AIR QUALITY

The air over Katmai appears essentially unaffected by human activity. Visibility and air quality can be called pristine, except for the small developed areas such as Brooks Camp where smoke from the lodge and cabins may temporarily accumulate. Air quality and visibility can be impaired by inclement weather, dust blown from the Valley of Ten Thousand Smokes, and locally by sulfur dioxide emitted from volcanoes.

The park and preserve area has been designated a class II area under the provisions of the Clean Air Act, as amended.

CLIMATE

The weather system of Katmai National Park and Preserve is characteristically unstable. In the summer the warmest monthly mean temperatures for lowland areas are in the fifties and sixties at Brooks Camp (10° to 20°C), while the winter mean temperatures are in the teens and twenties (-10° to 0°C). The heaviest precipitation occurs high on the east slopes of the Aleutian Range, where annual rainfall may exceed 200 inches (500 cm). The coastal region on Shelikof Strait is drier than the mountain areas, but it still receives over 60 inches (150 cm) of precipitation annually. Precipitation at Brooks Camp ranges from 20 to 40 inches (50 to 100 cm).

Upslope and downslope drafts near glaciers, river valleys, large bodies of water, and open tundra may produce sudden winds with velocities of 30 to 50 miles per hour (50 to 80 km/h). The most violent winds near Brooks Camp and the Valley of Ten Thousand Smokes tend to blow from the south or southeast. Locally referred to as "williwaws," such windstorms often rise without warning and can be life-threatening to people in small boats, particularly on open reaches of Naknek Lake where waves can build to heights of 5 to 7 feet (1.3 to 1.8 m).

Katmai Pass at the head of the Valley of Ten Thousand Smokes is infamous for its severe wind conditions. Large masses of air, caused by the interchange between the weather system of the Gulf of Alaska and that of the Bering Sea, stream across this pass, often at velocities exceeding 100 miles per hour (160 km/h).

VEGETATION

Plant species of several ecosystems--coastal rain forest, boreal forest, alpine tundra, northern coastal tundra, and Aleutian tundra--are present at Katmai. The two principal vegetation types are tundra and boreal forest, with the few groves of Sitka spruce found on the Shelikof Strait coast representing the edge of a third type, the temperate coastal forest.

The tundra formation occurs at the highest elevations, extending down to about the 2,000-foot level in many places and to sea level in the southwest and south. At higher elevations large areas are covered by snowfields or bare rock. The flora of the vegetated portions at these

elevations is restricted to low-growing species that can resist cold summer temperatures, strong winds, limited moisture availability, shallow soils, and a short growing season.

The boreal forest formation occupies most of the lower elevations, where soils are deeper and richer, summer temperatures are higher, permanent snowfields are absent, and winds have a lower intensity. Habitats are more diversified and include white spruce, birch, or balsam poplar forests, alder and willow thickets, and grasslands dominated by blue joint grass and bluegrass.

The appearance of the coastal rain forest is similar to the boreal forest, except that the dominant coniferous tree is Sitka spruce.

FISH

The park has a diversity of aquatic habitats that support a fish population typical of this portion of Alaska. Twenty-eight species are known to occur in the park and preserve. Principal fish include rainbow trout, salmon (chinook, coho, chum, pink, and sockeye), lake trout, char (Dolly Varden and arctic char), arctic grayling, whitefish (least cisco, humpback, pygmy, and round), northern pike, smelt, lamprey, sculpin, stickleback, longnose sucker, burbot, starry flounder, Pacific cod, and Alaska blackfish. Many of these species are important for commercial, sportfishing, and subsistence harvest either within or adjacent to the park complex.

The sockeye salmon is the most abundant and widely distributed species of salmon in the park. Salmon migrating from the sea to spawn in freshwater streams represent a tremendous upstream flow of nutrients that is vital to the integrity of park ecosystems. Salmon at all stages of their lives are a source of high-protein food of critical importance to many fish and wildlife species, and they significantly influence the distribution of predator species. The presence of salmon in turn attracts rainbow trout, which move into the streams seeking salmon eggs and fry. Wading shorebirds, gulls, and terns also feed on newly hatched fry. Lake trout, char, and northern pike feed on juvenile salmon during the one or two years that they spend in freshwater lakes before migrating to the sea. After spending two to four years in the ocean, the adult salmon again return to freshwater, migrating to the streams in which they hatched. A variety of terrestrial and avian carnivores, including river otters, mink, wolves, bald eagles, and ospreys, feed on adult salmon and their carcasses. Brown bears actively seek out salmon streams to obtain the protein they need to survive and reproduce. Decomposition of uneaten carcasses provides nutrients for the micro-organisms that will nourish the growing juvenile salmon during the period they spend in nursery lakes.

The Naknek drainage, most of which is in the park, comprises one of the four most productive salmon drainages in the region, and the continuation of salmon runs is vital to the Bristol Bay commercial salmon-fishing industry. Annual subsistence harvest of sockeye salmon in the Naknek drainage outside the park is estimated to be 6,000 to 7,000, with an unknown number removed through sportfishing.

Rainbow trout are found in many of the park's river drainage systems. World-class trophy fisheries are located in several lakes and streams, notably Naknek Lake, Brooks River, Brooks Lake, Grosvenor and Coville lakes, American Creek, and the Nonvianuk, Alagnak, and Kulik rivers.

WILDLIFE

An important attribute of Katmai National Park and Preserve is the rich diversity of wildlife. At least 29 species of land mammals, 6 species of marine mammals, and 150 species of birds have been reported in or near the park. The purpose of the several presidential proclamations that increased Katmai's acreage was specifically to protect sea mammals, sea birds, brown bears, moose, and wildlife habitat (see Wildlife Habitat and Large Mammal Habitat maps). Thus, the importance of wildlife to the park has long been recognized, and Katmai has become a sanctuary for the largest unhunted population of coastal brown bears in the United States. Concentrations of bears occur along the major salmon streams and provide a unique viewing experience for visitors (see Wildlife Habitat map).

Concentrations of brown bears occur along major salmon streams and provide a unique opportunity for visitors to view bears in their natural habitat. However, such concentrations are stressful for the usually solitary bears. Under most circumstances, a bear will not tolerate the presence of another bear. In fact, a large bear will kill a small bear if it has the chance. To congregate with other bears that are fishing at a salmon stream, a bear must be able to temporarily tolerate the proximity of the other bears. Still, most bears expend a considerable amount of effort in evaluating the threat posed by other bears and in maneuvering around them to avoid coming too close. The presence of people, whether fishing in the stream or attempting to photograph bears, and of aircraft and motorboats can further complicate a bear's effort to successfully catch fish.

Brown bears have one of the lowest reproduction rates of any North American mammal. Over a bear's maximum reproductive life span of 15 to 18 years, it usually reproduces no more than once every three years, with an average litter of two cubs. Three-quarters of the cubs may die from natural causes, such as accidents or predation by other bears, before reaching reproductive maturity. In bears, reproductive success seems to be most dependent on nutritional status, particularly protein intake, and salmon is the major source of protein for bears in the Katmai area. Thus, any disturbance that hinders bears' access to or feeding at salmon streams, and consequently reduces their intake of protein, is likely to be reflected in a reduced reproductive rate. Consequently, the potential for disturbing bears in the vicinity of salmon streams as a result of visitor activities must be considered in planning, especially long-term effects on the population.

Large adult brown bears can exceed weights of 900 pounds (400 kg). To annually regain the weight lost during winter hibernation, a bear must take any opportunity that arises during the short summer to obtain high-caloric or high-protein food. When people are not careful with their

food or garbage, a bear may discover that it is easier to obtain food from people than to forage for natural food. This can lead to a very dangerous situation if the bear learns to actively and aggressively seek food from people. Because relocating bears is not generally feasible or successful, once such a situation develops, it is likely to lead to the need to destroy the bear. A conscientious and diligent effort to keep food secure from bears is necessary to prevent this situation and its consequent impact on bears.

Another type of bear/human conflict can arise when a person surprises a bear at such a close range that the bear perceives no means of escape. Instead it charges, and perhaps injures, the person. A major school of thought suggests that this type of incident may be related to a bear's expectation of an encounter with a person, and conflicts are less likely to occur in areas of bear habitat where people are common because the element of surprise is reduced. The reason is not clear why such incidents have been rare in other areas of Katmai.

ENDANGERED OR THREATENED SPECIES

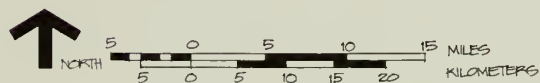
There is some uncertainty about which endangered or threatened species may occur in the park. Peale's peregrine falcon, Falco peregrinus pealei, which is not an endangered subspecies, is likely to range over coastal areas, while the endangered American peregrine falcon, Falco peregrinus anatum, may occupy interior areas of the park. The precise subspecific population composition has not yet been determined (1983 memorandum from U.S. Fish and Wildlife Service). The endangered Aleutian Canada goose, Branta canadensis leucopareia, does not nest within the park, but migratory flyovers and resting/feeding stopovers may occur.

Grizzlies, wolves, and bald eagles are not considered to be threatened or endangered in Alaska.

According to the U.S. Fish and Wildlife Service, no endangered or threatened plants are known to be present in the Katmai area.



-  SALMON BROODING
-  BEAR CONCENTRATION AT SALMON-SPAWNING SITES
-  BROWN BEAR DENNING AREA
-  BALD EAGLE FEEDING AREA
-  PRESERVE BOUNDARY
-  PARK BOUNDARY
-  ALAGNAK RIVER BOUNDARY



WILDLIFE HABITAT

KATMAI NATIONAL PARK AND PRESERVE

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- SALMON BROODING
- BEAR CONCENTRATION AT SALMON-SPAWNING SITES
- BROWN BEAR DENNING AREA
- BALD EAGLE FEEDING AREA
- PRESERVE BOUNDARY
- PARK BOUNDARY
- ALAGNAK RIVER BOUNDARY



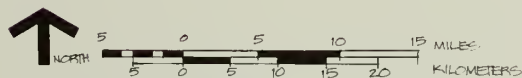
WILDLIFE HABITAT

KATMAI NATIONAL PARK AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

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-  MOOSE HABITAT
-  CARIBOU HABITAT
-  PRESERVE BOUNDARY
-  PARK BOUNDARY
-  ALAGNAK RIVER BOUNDARY



LARGE MAMMAL HABITAT

KATMAI NATIONAL PARK AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

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- MOOSE HABITAT
- CARIBOU HABITAT
- PRESERVE BOUNDARY
- PARK BOUNDARY
- ALAGNAK RIVER BOUNDARY



LARGE MAMMAL HABITAT

KATMAI NATIONAL PARK AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

CULTURAL ENVIRONMENT

ARCHEOLOGY AND ETHNOGRAPHY

The archeology of the Katmai area has contributed significantly to an understanding of prehistoric cultural developments in southwestern Alaska. Important discoveries have greatly increased knowledge of successive prehistoric cultures that are thought to be the forerunners of the Eskimo. These archeological sequences, spanning 6,000 years, represent some of the best known cultural sequences in the state and shed light on Alaska prehistory as a whole.

The earliest evidence of human occupation in the area is outside the park boundaries, in the Bristol Bay lowlands west of the Aleutian Range. Dating back 8,000 years, these people are believed to have been hunters of large game, and they occupied the area after the glacial retreats. Further evidence of early sites may be revealed as archeological investigations progress.

Two separate archeological sequences have been developed for the Katmai region, each representing the culture of a distinct ecological zone: the lowlands and lake region, which is marked by a rich salmon-spawning area and tundra outwash plains, and the Pacific coast, which is characterized by fjords, inlets, and abundant sea mammals.

The earliest evidence of human occupation on the west side of the park is concentrated on the shores of Naknek Lake, and it dates back to 2500 BC. Archeologists have divided this area into four periods of prehistoric occupation:

Kittewick Period - The archeological evidence of the earliest inhabitants indicates two groups of inland people (one relating to a contemporary Pacific coast group), who were more interested in hunting caribou than in fishing. Exploiting both forest and tundra, they persisted until about 1900 BC.

Gomer Period - The first Eskimo-related inhabitants began to appear around 1900 BC, with a shift in emphasis from hunting to salmon fishing. These people were most noted for the delicacy and fine craftsmanship of chipped stone implements. Their culture remained virtually unchanged for 800 years.

Brooks River Period - After a 700-year gap, a group undoubtedly related to the preceding hunters and fishers appeared around 400 BC. New cultural traits, influenced by more northern peoples, included the introduction of pottery. Hunting and fishing continued to be the primary activities.

Naknek Period - The latest prehistoric group after AD 1000 was greatly influenced by technological changes taking place far to the north. This is reflected in the production of gravel-tempered pottery and a reliance on ground stone tools of polished slate. It is these people who met the Russians when they came into the area.

In contrast to the west side, habitation sites on the coast were not concentrated in one general area as they were on Naknek Lake, but were widely scattered along the shoreline of Shelikof Strait. Archeologists have developed a separate sequence to describe these Pacific coast cultures because the inhabitants were predominantly dependent upon the sea:

Pacific Period (4000-2000 BC) - This period represents the time of the earliest cultural manifestations in the central Pacific Coast area, where sea mammal hunting was heavily emphasized.

Takli Period (2500-800 BC) - The continuity with the previous period is manifested in the shared characteristic knife and projectile point forms, the use of ground slate, round dwellings, and continued emphasis on sea mammal hunting.

Kukak Period (1000 BC-AD 200) - This period is marked by the first appearance of pottery and early contacts with people across the Aleutian Range. There are shifts from small campsite occupations to true villages and from sea mammals to land mammals for food. After AD 200, communication across the range increased considerably.

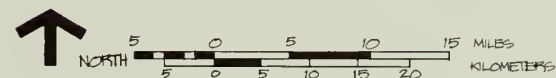
Katmai Period (AD 200-contact) - The introduction of gravel-tempered pottery and the resumption of the polished slate industry are notable during this period. At this time, all barriers to transpeninsula communications were broken, and the artifact assemblages are identical to those found in the Naknek period on the northwest slope.

In studying the relationships between the west slope and the Pacific Coast sequences, archeologists have concluded that increased communications after AD 500 led to probable movements from the west slope to the coast, strongly influencing and eventually replacing the earlier independent cultures of the Pacific coast. By AD 1000, the cultures of both sides were identical technologically, and the inhabitants were clearly Eskimo.

HISTORY

Europeans arriving in the late 1700s found peninsula Eskimos along the Shelikof Strait and in the interior, and the Aglegmiut on the Bering Sea coast. Both groups relied substantially on the great salmon runs and the hunting of caribou in the interior and of sea mammals on the Pacific coast. The two native groups traded with each other, and a main route of travel crossed Katmai Pass through the Aleutian Range. This trail joined Katmai Village, located at the mouth of Katmai River on the coast, with the villages of Old Savonoski, located on Savonoski River, and Pauwik, which was on the shores of Bristol Bay.

By 1791 Russian fur traders, seeking the valuable sea otter, had become established on both Kodiak Island and the Katmai Shelikof coastal areas. They virtually enslaved the coastal Alaska Peninsula Eskimos in the fur harvest operations, making the natives dependent upon the traders for their food, clothing, and other essentials. The Aglegmiut, however, were



CULTURAL RESOURCES

KATMAI NATIONAL PARK AND PRESERVE

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- PRESERVE BOUNDARY
- PARK BOUNDARY
- ALAGNAK RIVER BOUNDARY

↑ NORTH

5 0 5 10 15 MILES
5 0 5 10 15 20 KILOMETERS

CULTURAL RESOURCES

KATMAI NATIONAL PARK AND PRESERVE
UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE
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dealt with more as an independent people with whom trade was carried on.

Katmai Village was a major trading post of the monopolistic Russian American Company from 1799 to 1867, and the trail over Katmai Pass inland from the coast was used for trading with the inland people. The first Russian station on Bristol Bay was established in 1818, and the first missionaries were sent by 1845 from the Orthodox Church at Kodiak to the native settlements. By the time Alaska was purchased by the United States in 1867, the natives had been "Russianized."

After 1867 the Alaska Commercial Company purchased most of the Russian American Company holdings in the region and became the mainstay of the economy, although it did not control the social and spiritual lives of the people to the degree that the previous company did. Soon a rise in fur prices occurred, causing sea otters to be overhunted, and by about 1890 they were nearly extinct. Soon after the turn of the century, the trading stores were closed, and the natives returned to subsistence lifestyles. However, salmon canneries were established on Bristol Bay just about that time, and new job opportunities became available.

The trail over Katmai Pass remained in use during this period, primarily by prospectors heading for the Nome goldfields. Prospectors seeking minerals, coal, and oil in the Katmai region failed to find commercial deposits.

During the first week of June 1912, a series of earthquakes caused most natives in the Katmai region to leave, and they permanently abandoned Old Savonoski and Katmai villages. In later years the Naknek drainage was occasionally used for seasonal hunting, trapping, and fishing trips.

SIGNIFICANT RESOURCES

Approximately 50 prehistoric and historic archeological sites are known to exist within the boundaries of Katmai National Park and Preserve. The majority of these sites are related to prehistoric occupation. Eight prehistoric archeological sites and districts, varying in size and complexity, have been listed on the National Register of Historic Places:

- archeological site 49AF3
- archeological site 49MK10
- Brooks River archeological district
- Kaguyak village site
- Kukak village site
- Old Savonoski site
- Savonoski River archeological district
- Takli Island archeological district

Of these, the Brooks River archeological district is the best known and represents the largest concentration of sites within the park. Most of the known cultural sequence for the west side of the Aleutian Range was drawn from work in this area. A reconstructed Eskimo pithouse in the vicinity of Brooks River is included on the park's List of Classified Structures.

Other important aboriginal sites on the west side of the mountains include the two large sites on the Savonoski River. The village of Old Savonoski, located near the mouth of Savonoski River, pertains to the latest prehistoric era. The other site, located at the confluence of Grosvenor and Savonoski rivers, is much older, dating back to AD 200.

The most completely explored sites on the Pacific coast are at Kukak Bay and Takli Island. These sites provided the data for the cultural sequence delineations of the Pacific coast inhabitants. In addition, archeological sites have been identified at Kafliia Bay, Dakavak Bay, Cape Douglas, Swikshak Lagoon, Kaguyak, Hallo Bay, Devil's Cove, Missak Bay, and Kashvik Bay.

Existing historic resources are not as abundant. This reflects both the relatively light impact of fur trappers, prospectors, and sport hunters and the rapid deterioration of abandoned structures due to the harsh environment.

The majority of surviving historic structures relate to trapping activities that occurred in the area over the past 50-75 years. Fure's cabin, representative of the early 20th century lifestyles of nonnative trappers and prospectors, is on the park's List of Classified Structures and has recently been nominated to the National Register of Historic Places. Other cabins located at Brooks Lake, Munsen Cove, Research Bay, American Creek, Nonvianuk Lake, and Hallo Bay have been identified, but their historic significance has not yet been determined. A variety of other historic ruins are located at Swikshak', Kaguyak, Kukak, Katmai Bay, Old Savonoski, and several sites along the shore of Naknek Lake.

VISITOR ACCESS AND USE

ACCESS

Transportation within the region is principally by air, with King Salmon being the local center. King Salmon has daily jet service from Anchorage, 290 miles to the northeast. Park/preserve visitors can fly from King Salmon to Brooks Camp by way of commercial amphibious flight service, or they can charter air service to specific locations. Flights may also originate from any of the fishing lodges within a 150-mile radius of the park. It is estimated that 4,000 to 6,000 people annually enter the park by means of aircraft. Less than 50 visitors annually arrive by way of the landing strip at Kulik, and these are primarily lodge guests.

The majority of park visitors use a 10-mile gravel road leading from King Salmon to Lake Camp, just inside the western boundary. The only other road in the area is a 15-mile all-weather road that connects King Salmon, Naknek, and King Salmon Air Force Base. No roads connect the Katmai area with the remainder of the state, and there are no roads beyond Lake Camp into the interior of the park.

Most of the Lake Camp visitors remain in that area and fish in the Naknek River, although some travel by powerboat up Naknek Lake. Each year approximately 200 people from Lake Camp boat up Naknek Lake into the interior of the park.

The Pacific coast of Katmai has no commercially scheduled air or boat service. An unknown number of people visit the park along the Shelikof Strait coastline. Visitors to the coast must charter airplanes or boats capable of negotiating the unpredictable Shelikof Strait. Commercial fishermen are active in waters off the coast and occasionally go ashore.

RECREATIONAL ACTIVITIES

Katmai visitors participate in numerous activities, the majority of which are oriented to the lake region. The pockets of development within the park dictate to a great extent where visitors go and what they do.

A primary visitor interest is sportfishing because Katmai is known as an area for trophy-sized rainbow trout. Fishing for sockeye salmon is also popular during the early part of the annual summer run.

The Alaskan brown bear stimulates visions of danger and excitement in the minds of people. Thus, viewing, studying, and photographing these animals is a major visitor interest.

One of the highlights of the visitor experience is the trip to the Valley of Ten Thousand Smokes. This unique, geological phenomenon is seen by a majority of lodge guests and campers at Brooks Camp. The valley is the primary area used for backpacking, and use is likely to continue increasing.

Although kayaking and river floating were minor experiences in the past, participation has risen over the last few years. River running on the Alagnak Wild River has increased substantially. The Savonoski loop--which includes Bay of Islands, Grosvenor Lake, Grosvenor and Savonoski rivers, and the Iliuk Arm of Naknek Lake--is a popular route for backcountry boaters and is used by approximately 50 people per year.

Sport hunting and trapping are not allowed in the park; however, these activities will continue to be permitted in the 308,000-acre preserve, consistent with state regulations. Present levels of hunting and trapping are not precisely known but are thought to be low.

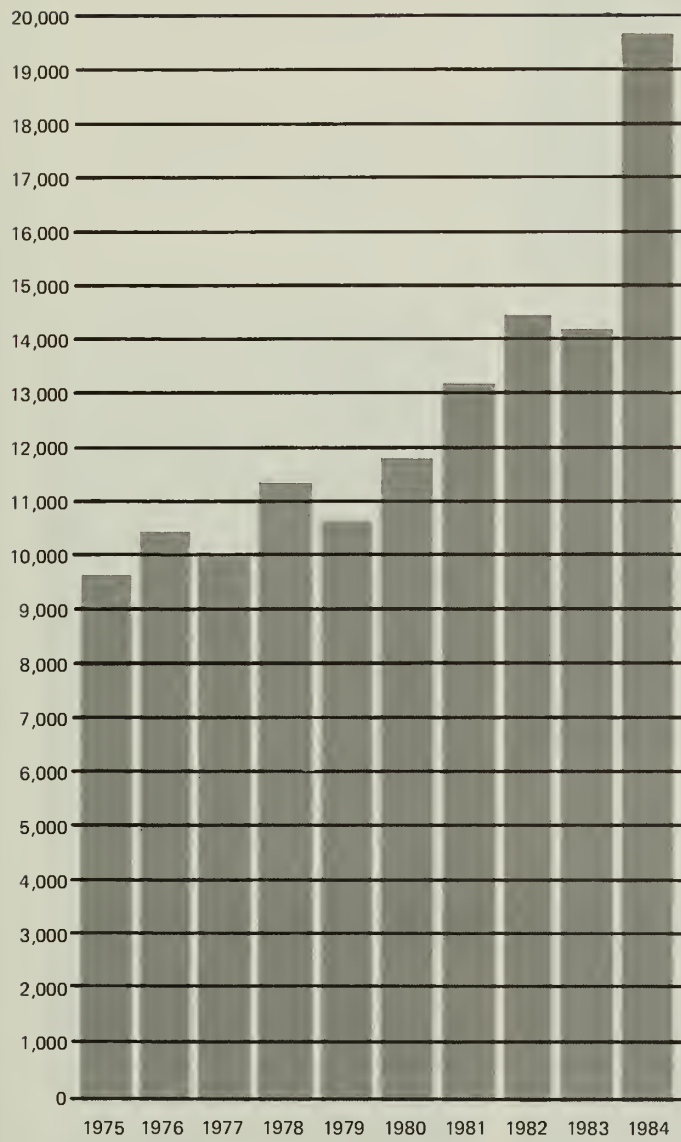
VISITOR USE TRENDS

Since overnight visitor use was first recorded in 1956, it has increased at a rate of approximately 264 stays per year, to a total of 8,173 overnight stays in 1984. Stays at concession lodges increased at a rate of 75 per year, to 3,596 in 1984. Use of the campground at Brooks Camp, which first exceeded 200 overnight stays in 1963, has increased at a rate of approximately 104 per year, to 2,822 stays in 1984. Recorded backcountry use has increased at a rate of 129 per year, to 1,762 people in 1984. Approximately half of the recorded backcountry use is by backpackers, primarily in the Valley of Ten Thousand Smokes. The remainder is by canoeists and kayakers, primarily on Naknek Lake, Grosvenor Lake, Brooks Lake, and Savonoski River.

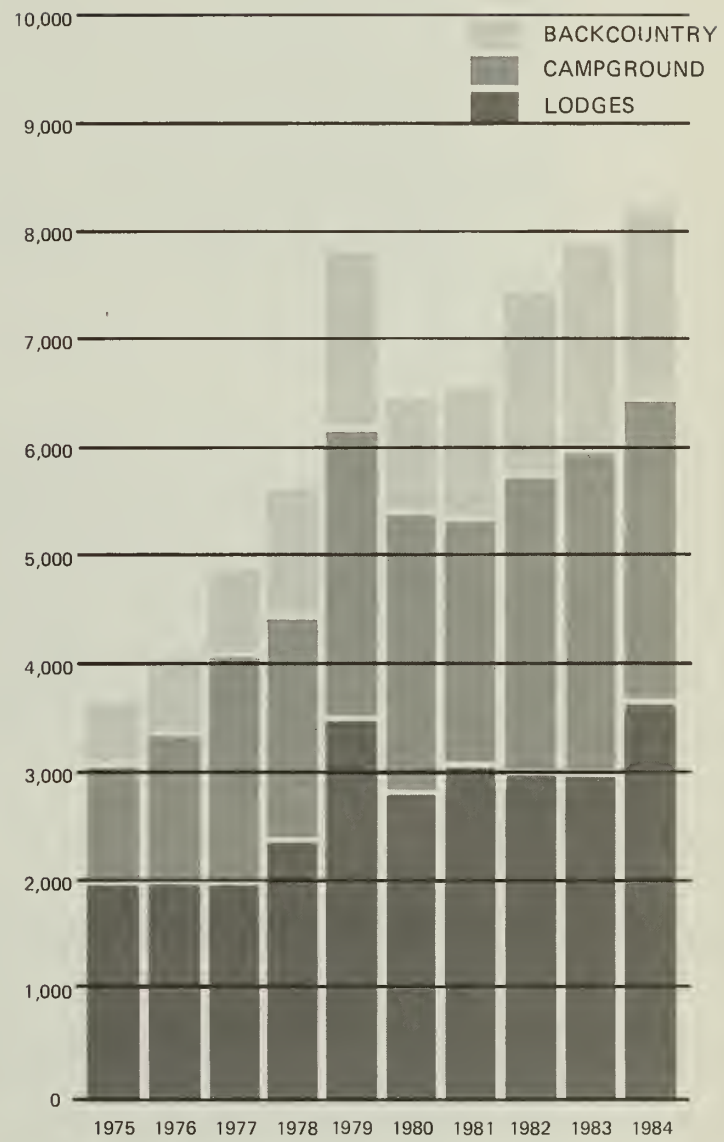
These figures underestimate the actual level of visitor use. Due to the size of Katmai and the number of access and use points, monitoring total use is difficult. In particular, the Bay of Islands is known to be popular for overnight and day use. Use of the Nonvianuk and Alagnak rivers has not been regularly monitored, nor has the apparently accelerating use of dispersed backcountry and coastal areas by fly-in sportfishermen.

If recorded use continues to increase at its 1956-84 rate, it will reach a level of approximately 12,000 overnight stays by the year 2000, including 4,200 overnight stays at concession lodges, 4,050 stays at the campground, and 3,900 stays in the backcountry. However, overnight use of concession lodges and the campground has accelerated substantially over the past 10 years, to average annual increases of 175 to 200, respectively, while the increase in recorded use of the backcountry has slowed somewhat, to 111 per year. If the rate of increase during the past 10 years continues, total overnight use may reach 20,000-25,000 by the year 2000, including 6,250 overnight stays at concession lodges, 6,300 stays at the campground, and 3,600 stays in the backcountry. Overnight lodge use will be limited by capacity, and limits will be placed on future development by the National Park Service. Any prediction of future use involves a high degree of uncertainty because future levels of use will be significantly influenced by unforeseeable factors and trends, including transfer of lands in the region to private ownership and the potential for oil and gas development in the region, with associated facility development and population growth.

RECREATION VISITS



OVERNIGHT STAYS



EXISTING FACILITIES

Four lodges and two primitive camps, with a total capacity of 100, serve visitors in the park and preserve. The lodges are Brooks Camp (60 pillows), Grosvenor (8 pillows), Kulik (18 pillows), and Enchanted Lake (8 pillows). The primitive camps are Nonvianuk (8 pillows) and Battle Lake (6 pillows). Brooks and Grosvenor lodges are located on public lands and are operated under a concession contract. Lodges on Kulik, Enchanted Lake, Nonvianuk, and Battle lakes are all on private land, but the guests use lands and waters in the park and preserve for their activities.

The summer headquarters for the park is at Brooks Camp. Facilities consist of a ranger station, visitor center, maintenance and service building, 11 employee residences, a powerhouse, a restored Eskimo pithouse for interpretive purposes, and a fish-cleaning building.

The Park Service also has facilities on the east shore of Brooks Lake, approximately 1 mile from Brooks Camp. These consist of three employee residences. There is a 1-mile road and a floating pedestrian bridge over Brooks River to connect these two sites.

A 28-site camping area managed by the Park Service is available at Brooks Camp. There are also three shelters and two elevated caches to secure food and garbage from bears.

A 23-mile road leads from Brooks Camp to the Valley of Ten Thousand Smokes, and a 2-mile trail goes from the end of the road at the Three Forks overlook to the valley floor. Close to Brooks Camp, a 4-mile trail climbs Dumpling Mountain, and 1/2-mile trail leads to a bear-viewing platform at Brooks Falls.

The only area in the park accessible by road is Lake Camp. It is primarily a day area used by King Salmon and Naknek residents. About 75 percent of Katmai's annual visitors enter the park at Lake Camp. The facilities consist of a boat dock and ramp, parking area, and a pit toilet.

The year-round NPS headquarters and employee residences are located at King Salmon.



ENVIRONMENTAL ASSESSMENT

ALTERNATIVES CONSIDERED

The management alternatives for Katmai National Park and Preserve focus on visitor use and park operations. The major visitor use and park operations actions of the proposed plan are described as alternative B so as to place them in context with the two other alternatives. Development costs are shown in appendix E.

ALTERNATIVE A - CONTINUATION OF EXISTING CONDITIONS (NO ACTION)

Visitor Use

The existing developed areas would remain essentially unchanged for the foreseeable future, even if demand for facilities or services exceeded existing capacities of lodges. Aircraft activity at Brooks Camp would continue to increase. The campground would probably increase in size to meet greater demands. Recreational activities at Brooks Camp would include sportfishing, tours of the Valley of Ten Thousand Smokes, and wildlife viewing. However, increasing numbers of people in the area could deter bears from using Brooks River, thus reducing opportunities to view and photograph these animals. Fishing along the Brooks River would continue, consistent with state and NPS regulations; no additional regulations would be instituted by the National Park Service, unless monitoring indicated a need to protect fish or wildlife resources. Lodge facilities at Grosvenor, Kulik, Nonvianuk, and Enchanted lakes would continue to serve primarily sportfishermen.

Lake Camp would still receive most of the park's day use. This area would not be substantially upgraded.

Hunting in the preserve, backcountry canoeing, kayaking, and hiking would be allowed; however, no additional facilities would be built to encourage or support these activities, nor would ranger camps be established to maintain them.

Park Operations

Management facilities or staff would not be expanded. The focus of the Park Service would continue to be at Brooks Camp during the summer. Visitor activities in the backcountry would continue to be only incidentally monitored. Permanent headquarters would be at King Salmon.

ALTERNATIVE B - DIVERSIFIED OPPORTUNITIES (PROPOSED PLAN)

Visitor Use

Under this alternative, recreational activities would be somewhat diversified, and the limited development of new facilities at other locations

in the park and preserve would be proposed. Activities associated with the Brooks Camp development would be kept at the present level, and the lodge would be maintained. However, all facilities would be relocated on a phased schedule to the spruce forest near the road to the Valley of Ten Thousand Smokes. The new campground would have 30 sites. Vacated sites at Brooks Camp would be returned to natural conditions. Moving the campground away from Naknek Lake would help reduce encounters between bears and people.

To diversify the visitor experience, the National Park Service would encourage wilderness canoeing excursions (Brooks Lake, Bay of Islands, Coville Lake, Grosvenor Lake and River, and Savonoski River); float trips (Nonvianuk and Alagnak rivers); tundra trekking (Battle Lake, Angle/Takayoto creeks area); scenic viewing and wildlife observation (Coville and Grosvenor lakes); and sportfishing, river trips, and hunting in the preserve.

Private enterprise would be encouraged to expand boat service from Lake Camp and Brooks Camp to wilderness drop-off points on Naknek Lake.

A primitive camping area would be established at Grosvenor Camp and would consist of five sites, a food cache, and a pit toilet. The lodge capacity could be expanded by two to four beds. The Grosvenor Camp area would serve as a staging area for scenic boat trips and fishing excursions up Coville Lake to American Creek and for backcountry boat trips down Grosvenor Lake to Grosvenor and Savonoski rivers and Naknek Lake.

A wilderness threshold camping area would be established at Bay of Islands for visitors wanting to use it as a staging area for wilderness canoe trips or as a destination campground for hiking, canoeing, and fishing in the immediate area. Facilities would include a food cache, pit toilets, and shelters. The camping area would not have designated campsites. Rental canoes would be available.

A designated camping area with two campsites would be provided at the outlet of Nonvianuk Lake for use by sportfishermen and visitors on Alagnak River float trips. A food cache and pit toilet would be provided. A similar camp might be constructed at the outlet of Kukaklek Lake, if warranted by future demand.

A designated camping area, food cache, and pit toilet would be established near the Yori Pass access point, next to the road to the Valley of Ten Thousand Smokes. It would serve as a base camp for day hikers and as a pickup point for backpackers.

Boat launching and docking would be improved at Lake Camp. Two picnic shelters and a nature trail would be developed for use by school groups and other local people from the King Salmon and Naknek areas.

Private lodges in and near the preserve could respond to future demands by increasing their capacities, in keeping with site and resource constraints.

Park Operations

Katmai would be divided into three management districts--the central lake area, the preserve, and the coastal/Aleutian Range region. Within these districts, park operations would be strengthened to support diversified visitor opportunities and to improve resource protection and management.

Summer headquarters would be based at Brooks Camp for the immediate future and would be moved, along with the other facilities, to the new development site near the road to the Valley of Ten Thousand Smokes. Small seasonal operations would be established at Bay of Islands and Grosvenor Camp, and the operation at Nonvianuk Lake would be maintained.

Seasonal ranger camps would be established at Geographic Harbor, Kukak Bay, and near Big River to provide resource and visitor protection along the coast.

If warranted by the level or nature of visitor use, additional seasonal ranger stations could be established at the outlet of Kukaklek Lake and at Battle Lake.

Park headquarters would continue at King Salmon.

ALTERNATIVE C - A WILDERNESS ADVENTURE CRUISE

Visitor Use

In place of Brooks Camp, a concessioner-owned and -operated cruise boat (or boats) capable of accommodating 30-40 people for several days would depart from Lake Camp daily between Memorial Day and Labor Day. As the boat headed slowly up Naknek Lake, the vast panorama of a wilderness landscape would gradually unfold. After a stop at Brooks River for wildlife viewing, the boat would lay over for the night along the shore of Research Bay in the Iliuk Arm of Naknek Lake, where docking facilities and a small concessioner building would be required. The next day, visitors would follow the route of early explorers to the Valley of Ten Thousand Smokes. To reach the valley, approximately 2 miles of new road would be constructed from Research Bay to meet the valley road. The existing road between Brooks Camp and this new road would revert to a trail, thereby reducing the length of vehicular roadway from 23 to 12 miles.

The tour boat would also provide drop-off and pickup services for visitors and their canoes or kayaks; areas could include the edge of Bay of Islands and Brooks Camp.

In addition to the tour boat, charter air service from King Salmon would continue to bring people to the park for either day visits or overnight stays. No ceiling would be placed on numbers of aircraft, and the level of aircraft activity would depend on demand. However, some areas, such as Brooks River, might be closed to aircraft landings to minimize disturbance to wildlife.

In keeping with the philosophy of minimizing land-based development in the core park, both Brooks Camp and Grosvenor Camp would be removed, and the areas would be restored to natural conditions. Aircraft landings would be prohibited on Grosvenor and Coville lakes so that they could become destinations for wilderness canoeists by way of the existing portage between Bay of Islands and Grosvenor Lake.

As in alternative B, the more traditional experiences in the core area of the park would be complemented by expanded recreational activities in the preserve. The expansion of lodges at Kulik and Enchanted lakes (by two to four beds each), the addition of primitive camping areas at Battle and Nonvianuk lakes (two sites each), and perhaps the addition of a camping area at Kukaklek Lake would be encouraged.

With a shift in emphasis from aircraft to boat access, the main departure point for visitors would shift from King Salmon to Lake Camp. From King Salmon airport, visitors would be taken by shuttle bus to Lake Camp, where they would embark by boat or chartered floatplane. Associated with docking facilities for boats and floatplanes would be an information center and a 30-site campground for backcountry hikers and people awaiting their boat departure.

Park Operations

Under this alternative the main summer operations base (with a ranger station, interpretive center, and NPS housing) would be moved from Brooks Lake to Research Bay because of the main tour boat landing at that location. As in alternative B, a seasonal ranger camp would be located at Bay of Islands because use in that area would increase. However, a ranger station would not be established at Grosvenor Lake, so that area would offer a wilderness-type experience, with access by portage from Bay of Islands.

ENVIRONMENTAL CONSEQUENCES

Because of the large size of Katmai and because resource monitoring and data-gathering have only been conducted for a few years, baseline information on many resources is not available. The selection of development sites and the design of facilities will require additional site-specific surveys and research. Although anticipated effects cannot be precisely quantified, the factors that are likely to be of concern can be identified, and in many cases the effects may be qualitatively inferred and their magnitude estimated. The effects are summarized in table 5 at the end of this section.

EFFECTS ON LARGE MAMMALS (BROWN BEARS, MOOSE, WOLVES)

Alternative A

Analysis. Under the no-action alternative the present park facilities would be maintained. Although no facilities would be expanded, they would be modified to comply with applicable health and safety standards. Existing facilities were not originally planned to consider areas important for moose calving, bear feeding (particularly along salmon streams), and wildlife movements. Any existing impacts on these wildlife areas would continue.

Maintaining the 6-acre Brooks Camp area at its current capacity would have no additional environmental effects beyond what are occurring now. (The impacts associated with concessioner-related development were discussed in the 1982 Environmental Assessment/Draft Development Concept Plan for Brooks and Grosvenor camps.) The presence of the lodge would still affect bear movements by causing the animals to use other routes. Anticipated increases in aircraft landings would tend to discourage bears from going to the lake beach and possibly the river mouth. Increases in sportfishing and visitor activities would result in interference with bear-feeding habits, with unknown long-term effects on the bear population. With a greater level of human disturbance, bears could tend to avoid the area. The frequency with which remaining bears succeeded in obtaining food from people would also probably increase. This would result in escalating numbers of dangerous confrontations between bears and humans and in greater demands for management actions to reduce conflicts.

No additional facilities would be built in outlying park areas, so effects associated with increasing visitor use would not be mitigated. Grosvenor Camp, covering about 2 acres, would continue unchanged. Use of the backcountry by sportfishermen would continue to increase, with concomitant increases in disturbance of feeding bears and in food-related conflicts between bears and humans.

Conclusion. Because existing facilities were not originally planned to consider important wildlife habitats or travel corridors, present impacts would continue. The major impact would be conflicts between bears and humans in the Brooks Camp area. Increasing human use of this site

would gradually deter bears from using this area, thus removing a prime visitor attraction. Development in other areas of the park and preserve would continue to adversely affect natural habitat of large mammals.

Alternative B

Analysis. Maintaining the Brooks Camp lodge at its current capacity until the expiration of the concession contract in 1996 would have no additional environmental effects beyond what are occurring now (see alternative A).

The proposed new development site for NPS, visitor, and concession facilities in the spruce forest, either between Brooks Camp and Brooks Lake or adjacent to the valley road, would be selected after extensive site-specific surveys. Aerial and ground surveys would be conducted for several alternative sites to determine habitat types and wildlife use patterns. Of particular concern would be resources that are rare, unique, or important to a wildlife species and that are limited in availability. Examples of these resources are bogs, marshes, and old-growth forest. Also of concern are resources such as wolf dens that would be disturbed by human activity on the site or nearby. The impacts of access to the site would be evaluated.

The construction of new facilities would affect a maximum of 10 acres. Moose, brown bears, and other large mammals would be excluded from the sites occupied by structures. Species of mammals at the site would also change; for example, porcupines would increase while lynx would decrease.

As soon as facilities were removed from the present Brooks Camp site, brown bears, moose, lynx, and other wildlife would be able to resume traveling through this area. Revegetation would eventually restore habitat for these species.

During the phased relocation of facilities, while some facilities exist at both sites, access and high levels of human activities could impede bears' access to and use of the river. Future restrictions of sportfishing on Brooks River could be necessary to reduce interference with bear-feeding habits and to prevent bears from learning to obtain food from people. Restrictions could apply to the number of people or to fishing seasons, locations, or methods.

If overnight accommodations at Grosvenor Camp, Kulik Lake, and Battle Lake were expanded, existing utility systems might have to be expanded. An increase in visitors would require that more supplies be flown in, and this could potentially disturb sensitive wildlife species such as bears, wolves, and lynx. The dispersal of visitor use to outlying areas would result in greater use of powerboats and aircraft, resulting in some disturbance of wildlife species near takeoff and landing areas.

Increased use at Bay of Islands due to the development of a wilderness threshold camp could disturb some wildlife species because the site is used by moose throughout the summer and is near a suspected moose-calving area. Brown bears also occur throughout the area,

primarily during the moose-calving season. The use of food caches, proper disposal of fish entrails, and location of visitor use areas to avoid bear travel routes would prevent most bear/human conflicts. If unanticipated conflicts developed, visitor use would be restricted. Visitor travel between Bay of Islands and Grosvenor Camp would probably increase, thus making encounters with wildlife more likely.

The Yori Pass area is not frequented by bears, so providing a camping area in this location would not result in bear/human conflicts.

Providing a camping area at the outlet of Nonvianuk Lake would result in minimal disturbance to wildlife.

Establishing seasonal ranger camps at Grosvenor Lake, Bay of Islands, and other locations would improve monitoring efforts and provide better resource protection. Systematic monitoring of wildlife populations would help ensure that healthy populations and the natural diversity of species would be maintained, in accordance with the provisions of ANILCA.

Conclusion. Relocation of the Brooks Camp development area would reduce adverse effects on bears; however, effects directly associated with the lodge would continue until 1996 (the end of the concession contract). The present development site would be revegetated to restore habitat for brown bears and other mammals. The construction of new facilities would affect a maximum of 10 acres, but the new site would be specifically selected to avoid effects on resources that are rare, unique, or important to a wildlife species. Greater use of powerboats and aircraft to transport more and more visitors to outlying areas could disturb wildlife next to landing and takeoff areas. Overall, the implementation of alternative B would reduce the effects on large mammals, compared to present conditions.

Alternative C

Analysis. This alternative would result in fewer land-based facilities than alternative A or B, and effects on mammals would be comparatively less. The removal of Brooks Camp could reduce bear/human encounters somewhat in this particular area. However, with continued aircraft and boat access, people could still fish and camp in this area at numbers similar to present levels.

In conjunction with the development of a cruise boat dock at Research Bay, a 2-mile road would be constructed to the existing gravel road from Brooks Camp to the Valley of Ten Thousand Smokes. The road would disturb wildlife movements in this area, and bear travel corridors would be crossed. Because of the very low level of traffic, however, wildlife movements would be hindered only minimally. The 11 miles of existing roadway from Brooks Camp to the new road location would be partially obliterated and restored, but an approximately 4-foot-wide section would be retained as a trail. The reduction of traffic would reduce impacts on wildlife movements.

If one or more tour boats stayed at Research Bay long enough for visitors to explore the immediate surroundings, bear/human conflicts in this area could increase slightly. Whether bears feed on salmon that are spawning in Research Bay Creek, at the south end of the bay, or near the development site is not known. If visitors had time, they would likely hike the 2 miles to Margot Creek to fish for rainbow trout and salmon or to view bears. The resulting level of human activity would potentially disturb bears and result in food-related incidents. Moose that use the marsh on the south and west sides of Research Bay could also be disturbed by the presence of humans. Overall, however, use at the Research Bay area would be considerably less than that occurring now at Brooks Camp because it would serve as a staging area rather than a destination.

Removing Brooks Camp (6 acres) and Grosvenor Camp (2 acres) would allow these areas to be returned to natural wildlife habitat. Prohibiting aircraft landings on Grosvenor and Coville lakes would reduce noise and the resulting disturbance of wildlife.

If warranted by demand, lodge accommodations and facilities at Kulik and Enchanted lakes could be expanded. Because these facilities were not located with respect to wildlife movements or important feeding areas, potential effects on wildlife would have to be monitored to guard against long-term adverse effects.

Establishing primitive camping areas at Battle, Nonvianuk, and Kukaklek lakes, and the resulting increase in human activities, could affect wildlife movements. However, no major wildlife concentrations are known at any of these sites. The Battle Lake site is located on an isthmus between Battle Lake and Narrow Cove, and an increase in human use or aircraft activities could affect wildlife movements, particularly because the shoreline areas tend to be steep. Camping areas would be selected so as to minimize disruptions of wildlife. Establishing camping areas at Nonvianuk and Kukaklek lakes in the preserve could result in increased sport hunting, particularly for brown bears. Monitoring the bear harvest and the bear concentrations along salmon streams in the preserve would help ensure that the bear population in adjacent park areas was being regulated by natural processes rather than by human harvest. Increased sport fishing associated with these camping areas could result in interference with bear-feeding habits.

Conclusion. Alternative C would result in the fewest effects on large-mammal habitat because land-based facilities would be reduced. The removal of both Brooks Camp and Grosvenor Camp would allow these areas to be restored to natural conditions. Conflicts between bears and humans could increase in the Margot Creek area, but the overall effect would be substantially less than what is now occurring at Brooks Camp. Adverse effects associated with existing developments in outlying areas would continue.

EFFECTS ON BIRDS

Alternative A

The effects of existing facilities and related visitor use would continue under alternative A. These facilities were constructed without considering the nesting patterns of bald eagles.

Alternative B

Analysis. Under alternative B the new site of NPS, visitor, and concession facilities in the Brooks River area would be selected after avian habitat and use of several alternative sites were analyzed using aerial photographs as well as on-the-ground surveys. Of particular concern are resources that are rare, unique, or important to bird species, such as standing dead trees used in feeding and nesting. Also of concern are resources that would be disturbed by human activity on the site or nearby, for example nesting bald eagles. The effects of access would also be evaluated.

The restoration of natural conditions at the present Brooks Camp site would also restore avian habitat used for feeding, nesting, and other activities. The development of a new activity site would open the forest canopy and reduce existing vegetation, resulting in a change in bird species. For example, the number of robins, white-crowned sparrows, and swallows would increase, while the number of varied thrushes, some warbler species, and northern three-toed woodpeckers would decrease. Most bird carnivores would be excluded by a reduction in total vegetation at the new site.

Also under alternative B the dispersal of visitor use by expanding accommodations at Grosvenor Camp and Kulik Lake could result in more adverse effects on bald eagles because of noise from airplanes and powerboats. The potential increase in visitor use at Grosvenor Lake, particularly at its bend, would have to be closely evaluated to avoid an adverse effect on nesting bald eagles in the vicinity.

Conclusion. Alternative B would reduce overall effects of development on avian habitat. The relocation of Brooks Camp would have minimal effects on bald eagles, because the new site would only be selected after extensive surveys to ensure avoidance of avian habitat. Nesting and feeding habitat would be restored at the present Brooks Camp area. Increased airplane and powerboat use throughout the park and preserve could disturb bald eagles as a result of noise from takeoffs and landings. The total effect would not be significant.

Alternative C

Analysis. Developing a concessioner cruise boat operation under alternative C would have minimal environmental effects on the land. However, noise from continued aircraft and boat access would probably continue to disturb bald eagles.

The presence of tour boats at Research Bay and of visitors hiking to Margot Creek could disturb nesting bald eagles. This effect could be offset by a resumption of bald eagle nesting in the Brooks River area.

Conclusion. The level of effects on bald eagles would be reduced, although visitor use in the Margot Creek area could disturb nesting eagles. Effects of airplane and powerboat use would continue. Overall the effects would not be significant.

EFFECTS ON FISH (SALMON AND TROUT)

Alternative A

Increased levels of sportfishing would place pressure on some fish populations, particularly rainbow trout. Over the long term the trout population in the Brooks Camp area could be adversely affected.

Alternative B

Analysis. Some future restrictions on sportfishing along Brooks River could be necessary to reduce interference with bear-feeding habits. The level of pressure on populations of trout and other fish species would be regularly monitored in cooperation with the Alaska Department of Fish and Game to ensure the preservation of healthy populations of a diversity of species. Research on population dynamics and movements of rainbow trout is currently underway, and recommendations to augment the population would be implemented as needed.

Heavier use of the Bay of Islands area and other outlying areas could cause greater pressure on the trout fishery, requiring more restrictive sportfishing regulations. Regulations such as the number of fish kept by anglers would be adjusted in accordance with monitoring and sampling information.

Establishing seasonal ranger camps at Grosvenor Lake, Bay of Islands, and other locations would improve monitoring efforts and provide better resource protection.

Conclusion. Alternative B would have no significant effects on the fishery resources of the park and preserve. Trout populations could be improved over the long term by implementing recommendations of the current research program.

Alternative C

Analysis. The construction of a dock at Research Bay to support a cruise boat operation would be done when salmon are not in the bay or passing through it to get to Research Bay Creek or Margot Creek, which are salmon-spawning areas. If one or more tour boats stayed at Research Bay long enough, people would probably hike the 2 miles to Margot Creek to fish for rainbow trout and salmon.

Expanding lodge facilities at Kulik and Enchanted lakes, and establishing camping areas at Nonvianuk and Kukaklek lakes in the preserve, could result in greater sportfishing pressures.

Establishing seasonal ranger stations would provide better monitoring of fishing activities, and adverse effects could be mitigated through the establishment of appropriate regulations.

Conclusion. Alternative C would have no significant effect on fishery resources.

EFFECTS ON VEGETATION

Alternative A

Analysis. Existing effects on vegetation at development sites throughout the park and preserve would continue unchanged. Increasing use at these sites would result in additional trampling of vegetation and tree seedlings and in soil compaction. The campground at Brooks River would slowly become larger, and soil compaction and erosion could occur, contributing to windthrows of the mature poplars that make up the overstory.

Conclusion. Approximately 215 acres would continue to be affected by the presence of development and associated visitor use.

Alternative B

Analysis. Maintaining the Brooks Camp lodge at its current capacity until the expiration of the concession contract in 1996 would continue present effects. Increased use of the lodge could increase trampling of vegetation and soil compaction in adjacent areas. Developing a new site for NPS, visitor, and concession facilities in the spruce forest either between Brooks Camp and Brooks Lake or adjacent to the valley road would affect about 10 acres. The specific site would only be selected after analyzing aerial photographs and conducting on-the-ground surveys to determine habitat and wildlife patterns. Resources that are rare, unique, or important to a wildlife species and limited in availability would be avoided. Such resources include bogs, marshes, and old-growth forest.

Vegetation at the new development site would be altered or removed. Foot traffic around development sites would result in trampled shrubs and tree seedlings and in compacted soils. Rainfall runoff would increase slightly because of vegetation removal and surface covering. The potential for human-caused wildfire would be greater in the spruce forest than at the present campground site. Visitor traffic in the new lodge area would eventually establish trails between structures. "Hardening" these trails by adding gravel or installing drainage structures would limit the extent of impacts.

As soon as facilities were removed from the present Brooks Camp site, the area would be revegetated by transplanting seedlings from adjacent balsam poplar, birch, and mixed-forest plant communities.

Use would likely continue to increase in the Valley of Ten Thousand Smokes, which is the primary area for backpacking. This could result in some trampling of revegetating areas, and measures might have to be taken to disperse use so as to minimize adverse effects.

Providing a camping area at the beginning of the Yori Pass route (specific location not yet determined) would result in a maximum of 1 acre of vegetation being removed and minor leveling for tent pad sites.

If overnight accommodations at Grosvenor Camp and Kulik Lake lodge were expanded, depending on demand, a maximum of 10 acres of vegetation would be removed. At Grosvenor Lake camping areas would likely be located in a poplar or birch forest some distance from the concession facility.

A canoe rental at Bay of Islands would require the construction of limited support facilities, including canoe storage and a seasonal tent frame residence. Approximately 1 acre of vegetation would be removed for these facilities. The portage trail would be upgraded to handle the projected increase in foot traffic, thus alleviating additional impacts on trailside vegetation.

Establishing a camping area at the outlet of Nonvianuk Lake would affect 0.5 acre of vegetation. The proposed site is in an area of shrub tundra, and concentrating camping in one area would reduce the overall effects of camping throughout a large area.

The adverse effects of increased camping along the Alagnak Wild River corridor would be partially mitigated by designating campsites to reduce impacts of random camping.

Establishing coastal seasonal ranger camps at Geographic Harbor, Kukak Bay, Big River, Grosvenor Lake, Bay of Islands, and other locations would directly affect about 1 acre per location. Other than the removal of vegetation for the construction of facilities, impacts would be minimized.

Conclusion. Vegetation on approximately 28 acres would be removed or altered as a result of new development, and 6 acres at Brooks Camp would be restored to natural conditions. The net effect would be a loss of vegetation on 22 acres. Effects would continue at existing development sites.

Alternative C

Analysis. Alternative C would result in fewer land-based facilities than alternative A or B, with a consequent reduction in adverse effects associated with their use. Developing a cruise boat operation would have minimal effects on vegetation, and by offering an alternative to camping, associated impacts such as trampling of vegetation and soil compaction would be reduced.

The construction of a Lake Camp docking facility for the cruise boat operation would substantially increase human use at this site. This would result in trampled vegetation and soil compaction, making it necessary to develop and harden trails to preclude compaction belowgrade and to provide for subsurface drainage. The development of a picnic area, an interpretive facility, a parking area, and a campground would result in the alteration or removal of up to 2 acres of vegetation.

The construction of a docking facility and small concessioner building at Research Bay would affect up to 0.5 acre of vegetation. The precise size of the structure would not be known until parking, shelter, and storage needs were determined.

In conjunction with the cruise boat dock, a 2-mile road would be built from Research Bay to the existing gravel road from Brooks Camp to the Valley of Ten Thousand Smokes. The new road would directly affect approximately 5 acres of previously disturbed land. Vegetation would be removed along the roadway, and the area would be graded, leveled, and graveled. Structures would be installed where necessary to provide for drainage, and the surface would be graveled to reduce runoff.

The removal of Brooks and Grosvenor camps would allow a total area of about 8 acres to be restored and revegetated. The 11 miles of existing roadway from Brooks Camp to the new road location would be partially obliterated and restored, but an approximately 4-foot-wide section would be retained as a trail; altogether approximately 13 acres would be restored along the new trail.

Establishing primitive camping areas at Battle, Kukaklek, and Nonvianuk lakes would result in the loss of vegetation, and visitor use would result in the trampling of plants. At Nonvianuk Lake present impacts caused by random camping throughout a large area would be reduced because camping would be restricted to a smaller area.

Establishing seasonal ranger stations at Bay of Islands, Geographic Harbor, Kukak Bay, and Big River would affect approximately 1 acre of vegetation at each site.

Conclusion. Implementation of alternative C would have the most beneficial effects on vegetation of all the alternatives. Vegetation would be removed or altered on approximately 13 acres, while 21 acres would be restored to natural conditions. The net effect would be 8 acres restored to natural conditions.

EFFECTS ON WATER QUALITY

Analysis. Under alternative A existing effects on water quality would continue. All of the alternatives have the potential to cause pollution from petroleum products from powerboats. This potential would be greatest under alternative C because of the cruise boat operation. Under the proposed plan, water and waste facilities would have to be developed for a five-site campground at Grosvenor Lake.

Under alternative C docking facilities would be constructed at Research Bay. This would disturb the lake bottom because of fixed pier placement. A slight, temporary increase in turbidity would result.

Conclusion. None of the alternatives would have significant effects on water quality.

EFFECTS ON AIR QUALITY

Analysis. Under all of the alternatives the air quality in the immediate vicinity of camping areas would be reduced by campfires. Construction activities under alternative B or C would decrease air quality over the short term because of dust and vehicle emissions. The relocation of Brooks Camp under alternative B would increase the distance between the landing area and the visitor facilities. This would result in the need for additional vehicles to transport visitors, supplies, and garbage. Increased emissions would result.

Conclusion. None of the alternatives would lead to a significant deterioration in air quality.

EFFECTS ON WILDERNESS VALUES

Alternative A

Analysis. The continuation of existing developments under alternative A would concentrate most visitor use at Lake Camp, Brooks Camp, Valley of Ten Thousand Smokes, Grosvenor Camp, and private lodges in and near the preserve (Enchanted, Kulik, and Battle lakes). Increasing visitor use at these sites, and access to them by airplane or powerboat, could lead to greater impacts on surrounding areas and a reduction in wilderness values. The expansion of any of these developments would affect the wilderness values of adjacent lands. The remainder of the park and preserve would be virtually untouched by man.

Conclusion. The continuation of existing development and visitor use trends would have no significant effect on wilderness values.

Alternative B

Analysis. Under alternative B, visitor use would be dispersed by improving access to destination locations and by expanding various existing facilities in outlying areas. Relocating the Brooks Camp lodge to a new site would allow the present site to be restored to more natural conditions, although the area would probably continue to attract people for sportfishing and bear viewing. Operating an electrical generator at the new lodge site would be noisy, but the sound would be local and would be muffled by the surrounding spruce forest. The location of visitor facilities farther from plane landing sites would result in the need for additional vehicles to transport visitors, supplies, and garbage, which would affect wildlife.

As more people started to visit Bay of Islands and other areas of the park, use of aircraft or motorboats for access would increase. More frequent plane takeoffs and landings would raise noise levels, as would the increased use of powerboats. Increased visitor use in previously unused areas could result in a gradual deterioration of wilderness values in terms of trampled vegetation and wildlife abandoning highly used areas.

Conclusion. Wilderness values would be affected by increasing levels of visitor use at developed areas. This would result in a loss of vegetation and habitat. These effects would largely be restricted to developed areas, and wilderness values would be perpetuated in the rest of the park and preserve.

Alternative C

Analysis. Under alternative C the cruise boat operation would represent a daily intrusion during summer on the wilderness values of Naknek Lake and especially at Research Bay. The removal of Brooks and Grosvenor camps would restore the wilderness character of these areas.

Conclusion. Alternative C would have more of a positive effect on wilderness values than alternative A or B because more areas would be restored to natural conditions.

EFFECTS ON VISITOR USE AND SERVICES

Alternative A

Analysis. The no-action alternative would not expand visitor use to any significant degree. The National Park Service would not develop additional facilities, nor would private enterprise be encouraged to expand concession operations. Some visitors who wanted to experience more of Katmai would be disappointed because the limited existing facilities make this difficult to do. Increasing levels of human activity at Brooks Camp would exclude greater numbers of bears from using the river, reducing opportunities for people to view and photograph bears. Backcountry use at Katmai would continue to increase steadily, focusing on backpacking in the Valley of Ten Thousand Smokes and backcountry boating on Naknek Lake, the Savonoski loop, and the Alagnak and Nonvianuk rivers. Generally, present trends would be continued, with Brooks Camp featuring sportfishing as well as tours to the Valley of Ten Thousand Smokes. Lake Camp would remain essentially unchanged and would continue to receive the majority of the park's day use. Current backcountry use patterns would continue.

Conclusion. Visitor use and services would not be affected appreciably. Increasing levels of use could decrease the wilderness experience for some visitors.

Alternative B

Analysis. Implementation of alternative B would provide the facilities needed to disperse and accommodate more visitors. Facilities would be developed at various locations to expand opportunities for camping, backcountry activities, fishing, and wilderness-oriented use in general. Better interpretive opportunities would be provided by building a visitor center in the new developed area. The long-term relocation of all facilities from Brooks Camp to the spruce forest area would change the character of the visitor experience; this would be offset by the fact that there would be less human interference with bears using the river for feeding, and bear/human conflicts would be reduced. Relocating facilities to the spruce forest would diminish the experience of visitors familiar with the present lodge because views of the lakes would be reduced, there would be greater exposure to insects, and travel distances to prime attractions would be farther.

Visitor use of Coville and Grosvenor lakes would be encouraged so as to reduce pressures on the current Brooks Camp development. The Grosvenor area offers opportunities for wildlife viewing and dramatic scenery, and Grosvenor Lake provides opportunities for wilderness canoeing and kayaking. Expanding or providing primitive camping areas at Nonvianuk, Battle, and Kukaklek lakes would contribute to the attractiveness of these areas as activity centers. A camping area at Kukaklek Lake would support subsistence and sport hunting in the preserve. Canoe and boat trips would be encouraged, particularly at Bay of Islands. Visitor use on the Alagnak Wild River would be enhanced because camping areas would be designated and food caches and pit toilets would be constructed. The coastal zone and the Aleutian Range would be available for wilderness trips; no facilities other than seasonal ranger camps would be provided along the coast.

Conclusion. Alternative B would have the most positive effect on the visitor experience because there would be more opportunities for visitors to camp, fish, and enjoy various areas of the park. Conflicts between bears and people would be reduced in the Brooks Camp area, thus making the experience safer for visitors. Dispersing use throughout the park would help prevent crowding of locations such as Brooks Camp.

Alternative C

Analysis. Alternative C would provide an entirely different type of experience for visitors in that cruise boats would be the primary means of circulating within the park's central lake region. Many of the current activities within this area would remain available. The staging area for the tour to the Valley of Ten Thousand Smokes, however, would shift to Research Bay. Opportunities for wildlife viewing, particularly bears, would be provided at Research Bay and Margot Creek, but over the long run conflicts could develop that would result in reduced opportunities. Sport fishing and hunting would be accommodated in the preserve. The availability of cruise boats and the expansion of the Kulik Lake lodge would replace some of the facilities lost at Brooks and Grosvenor camps. Visitors wanting a total wilderness experience could choose between the

coastal region or Coville and Grosvenor lakes, where all development would be removed. Canoeing and backcountry use would be encouraged by providing staging areas at Bay of Islands. The Lake Camp area would be the primary staging area for visitors taking the cruise boat tours. Additional facilities at Lake Camp for picnicking, camping, and other activities would benefit local residents.

Conclusion. Alternative C would change the primary visitor experience from one centered around land-based facilities to one centered around a lake cruise. Although this alternative would reduce environmental impacts, it would also prevent cruise boat visitors from directly experiencing the wilderness setting. However, the entire park would still be available to those visitors wanting a true wilderness experience.

EFFECTS ON CONCESSIONER AND PRIVATE ENTERPRISE

Alternative A

The no-action alternative would not affect either the concession operation or private enterprise within Katmai. Demand for aircraft service for access to the park would continue to increase.

Alternative B

Analysis. Alternative B would commit the concessioner to some long-term change at Brooks Camp, but most actions at this location would be the responsibility of the National Park Service. The existing facilities at Brooks Camp would be either moved or bought by the federal government, thus reducing the overall concessioner's investment at the new site. Any moderate expansion of private operations at Battle and Kulik lakes could help increase demand. Again the cost is unknown, but additional revenues would be generated for the owners. Any further development of air taxi service would allow visitors a wider choice of destinations. Finally, alternative B would broaden the concession operation by encouraging canoe rentals and more float trips.

Conclusion. Alternative B would provide more opportunities for concession enterprises in the park. Relocation of most of the Brooks Camp development by the Park Service would reduce the cost to the concessioner.

Alternative C

Analysis. Implementation of alternative C would require a substantial investment by the concessioner for cruise boats. The overall concession operation would shift from being land-based to being water-oriented. It is not known if an operation of this type would be economically viable. Among the inherent problems would be an extremely short season of use, making it difficult to recover the investment within a relatively short time. Activities in the preserve would complement those in the park by featuring sportfishing, hunting, and river running as principal activities.

The demand for these activities could increase under this alternative, and facilities at Kulik, Battle, and Nonvianuk lakes could be expanded.

Conclusion. The concessioner would have to make a sizable investment in cruise boats, the cost of which would be difficult to recover. Compared to alternative B, there would be fewer opportunities for concessioners to offer additional visitor services.

EFFECTS ON CULTURAL RESOURCES

Analysis. The no-action alternative would not result in any new adverse effects on the cultural resources of Katmai National Park and Preserve. Effects on resources in the vicinity of Brooks River would continue to occur as a result of Brooks Camp operations. The need for upgrading and repairing facilities could result in additional effects on archeological resources in the Brooks River archeological district.

Although a new campground in the spruce forest near the valley road would be developed under alternative B, the site would be away from the significant cultural resources that comprise the Brooks River archeological district. No significant resources are expected to exist at the new development site. Current impacts resulting from facility operations and maintenance activities at Brooks Camp would be reduced.

In the Grosvenor Camp area, archeological site MK5 is located on an old lake terrace just beyond the present camp. Future development actions at Grosvenor Camp under alternative B would be specifically designed to avoid any adverse effects on this site.

Other development activities throughout the park would be specifically designed to avoid effects on known archeological sites. Implementation of any actions would be preceded by site-specific archeological surveys and clearances before any ground disturbance. Systematic surveys would identify and evaluate all resources within the park and preserve.

Development actions under alternative C would be away from identified cultural resources in the park. A reduction in the level of human activity at Brooks Camp would likely result in reduced effects on archeological resources.

Conclusion. Alternative A would continue effects on archeological resources in the Brooks Camp area. These effects would be alleviated under alternative B or C.

EFFECTS ON THE LOCAL ECONOMY

Analysis. Greater visitation could be expected under all the alternatives. More visitors would economically benefit the immediate Katmai region in two ways. Facility development under alternative B or C would create temporary construction jobs and income, and additional visitor expenditures would be generated within the region.

Alternative B or C could result in a permanent increase in employment opportunities within the region. In accordance with section 1308 of ANILCA, local residents with special knowledge or expertise would be hired to meet increased staffing needs.

The no-action alternative would not be expected to have any effect upon the Katmai region beyond existing conditions. However, cumulative resource impacts could result in a long-term decline in economic returns.

Conclusion. The economic effects would be greatest under alternative B or C because of construction and more visitors.

Table 5: Summary of Environmental Consequences

	Alternative A--Continuation of Existing Conditions	Alternative B--Diversified Opportunities (Proposed Plan)	Alternative C--A Wilderness Adventure Cruise
Effects on Mammals (brown bears, moose, wolves)	Continuation of present effects on wildlife areas; more bear/human conflicts at Brooks River because of increased use.	Continuation of present lodge impacts until 1996. Reduction in bear/human conflicts once development relocated and with possible sportfishing regulations; minimal conflicts at new site; more natural conditions for bears and mammals at restored site. Possible effect on moose-calving area and potential for bear/human conflicts at new Bay of Islands wilderness threshold camp. Reduced bear/human conflicts at new camping areas due to proper location and secure food storage.	Reduction of visitor use and bear/human conflicts in Brooks Camp vicinity, but higher potential for conflicts in Margot Creek area. Altered wildlife movements at Research Bay due to construction of 2-mile road. Restoration of wildlife habitat with removal of Brooks and Grosvenor camps.
Effects on Birds	Continuation of existing effects.	Minimal effects on bald eagles at new Brooks Camp development site; continuation of present effects at existing lodge until 1996, with restoration of feeding and nesting habitat when all facilities removed. Possible effects on bald eagles in outlying areas due to aircraft and powerboat use.	Reduced effects on bald eagles at Brooks Camp area, but some continued effects from aircraft and powerboat use. Possible disturbance of nesting bald eagles in Margot Creek area.
Effects of Fish (salmon and trout)	Increased pressures on some fish populations, particularly rainbow trout, due to sportfishing.	Possible improvement of trout fishery in Brooks River as a result of current research. Increased trout fishery pressure in the Bay of Islands area because of new camping area.	Greater sportfishing pressure in Margot Creek and at Nonvianuk and Kukaklek lakes.
Effects on Vegetation	No additional effects on vegetation other than from increased use at developed areas, resulting in trampled vegetation and some soil compaction.	Removal or alteration of vegetation on a total of approximately 28 acres (10 acres new Brooks Camp area, 10 acres Grosvenor Camp and Kulik Lake lodge, 2.5 acres camping areas, and 5 acres seasonal ranger camps). Restoration of 6 acres at existing Brooks Camp site. Net adverse effect on 22 acres. Trampling of vegetation and soil compaction from visitor use. Increased fire potential from campfires.	Removal or alteration of vegetation on total of approximately 13 acres (2 acres Lake Camp, 5.5 acres Research Bay, 5 acres seasonal ranger camps). Restoration of vegetation on 8 acres (6 acres Brooks Camp, 2 acres Grosvenor Camp) and approximately 13 acres along 11-mile road converted to trail between Brooks Camp and Valley of Ten Thousand Smokes, for a total of 21 acres. Restoration of natural conditions on 8 acres net.
Effects on Water Quality	Potential for pollution from petroleum products from powerboats.	Slightly more potential for pollution from petroleum products due to increased use.	Greatest potential for pollution from petroleum products because of cruise boat operation. Slight temporary increase in turbidity at Research Bay due to construction of docking facilities.
Effects on Air Quality	Slight reduction in air quality near camping areas due to campfires.	Slight reduction in air quality near camping areas due to campfires. Short-term decreases in air quality from dust and vehicle emissions during construction.	Same as B.

	<u>Alternative A--Continuation of Existing Conditions</u>	<u>Alternative B--Diversified Opportunities (Proposed Plan)</u>	<u>Alternative C--A Wilderness Adventure Cruise</u>
Effects on Wilderness	No additional effect; preservation of wilderness values in most of park and preserve.	Greater noise from more frequent plane takeoffs and landings, plus increased use of motorboats, thus detracting from wilderness qualities. Some reduction of wilderness quality from increased visitor use in previously unused areas. Preservation of wilderness qualities in most of park and preserve.	Restoration of wilderness setting at Brooks and Grosvenor camps. Intrusion on wilderness values on Naknek Lake daily during the summer as a result of cruise boat operation. Continued intrusions from aircraft and motorboat use.
Effects on Visitor Use and Services	Visitor use not enhanced to any significant degree. Possibly fewer opportunities to view bears along salmon streams over the long term because of increased interference from humans.	Expanded visitor opportunities and new experiences; bear hazards and effects on bears diminished by directing visitors away from areas used by bears; backcountry opportunities greatly expanded; additional information services available at new visitor center and Lake Camp.	Unique visitor experience because of cruise boat operation; improved local facilities at Lake Camp; visitor services and protection available at ranger stations.
Effects on Concessioner and Private Enterprise	Concession operations and private enterprise unaffected. Probable increase in demands for air taxi service because of increasing levels of use.	Modest expansion of opportunities for concessioner and private enterprise at Battle, Kulik, and Grosvenor activity areas; float trips and canoe rentals also possible. Substantial investment involved in Brooks Camps relocation, providing larger operational base for revenue generation; initial cost could be partially offset by NPS relocation of existing Brooks Camp facilities.	Change from land- to water-based operation; substantial investment in cruise boats, with relatively long payback period because of short operating season.
Effects on Cultural Resources	No new effects; continued effects on archeological resources at Brooks Camp.	No adverse effects; proposed developments designed specifically to avoid effects on known significant archeological sites; reduced effects at Brooks Camp.	
Effects on Local Economy	Possible long-term reduction due to cumulative adverse resource effects.	Additional local income and employment because of construction associated with new, relocated, or expanded facilities; additional income within the region because of increased visitation; local hire possibilities due to increased staffing needs.	

Note: Because the alternatives are conceptual in nature, exact acreage figures, details concerning water sources, waste treatment, etc., have not yet been formulated.

COMPLIANCE

All alternatives are in compliance with Executive Order 11988, Floodplain Management (3 CFR 121, supp. 1977), and EO 11990, Protection of Wetlands (3 CFR 121, supp. 1977) because no floodplains or wetlands are anticipated to be affected by development actions. Therefore, a statement of findings is not required at this time. A final decision regarding this compliance status will be made during the review of specific site-development plans.

Alternatives B and C would directly affect the coastal area of the park because ranger camps would be established. These specific elements of the plan are believed to conform with the Estuary Protection Act (16 USC 1221 et seq.); the Marine Protection, Research, and Sanctuaries Act of 1972 (16 USC 1361 et seq.); the Marine Mammal Protection Act (16 USC 1361 et seq.); and the Coastal Zone Management Act (16 USC 1451 et seq.). A determination of consistency with the Alaska Coastal Zone Management Act of 1977 has been prepared for alternative B (the proposed plan), which has been found to conform with the Alaska coastal management program of May 1979 (see appendix F). Compliance with the state coastal management program and section 307 of the federal Coastal Zone Management Act (PL 82-583), as amended, is thus ensured.

Additional air and water pollution resulting from implementation of either alternative B or C would be too small to measure or to require compliance with the Clean Water Act (33 USC 1251 et seq.) or the Clean Air Act (42 USC 1401 et seq.). Water drawn for human consumption will be treated to meet state and federal standards in conformity with the Safe Drinking Water Act (42 USC 300).

No federally listed threatened or endangered wildlife species are known to live in, or depend for existence on, habitats within Katmai National Park and Preserve. As lists of threatened and endangered species change and as new populations are located, consultation with the U.S. Fish and Wildlife Service will continue on any action that may affect a threatened or endangered species. Additional consultation will be achieved through the review of this plan and specific site-development proposals by the U.S. Fish and Wildlife Service. The presence of two endangered species is possible but not documented. If either of these species is found during implementation of the proposed plan, the U.S. Fish and Wildlife Service will be contacted, and appropriate steps will be taken to ensure their protection.

No prime or unique farmlands will be adversely affected by the plan.

CONSULTATION AND COORDINATION

PUBLIC INVOLVEMENT

The public involvement program for the Katmai planning effort began in spring 1982. At that time a newsletter was distributed, indicating the start of the project and requesting assistance with the development of the general management plan. The information generated during this phase formed the foundation for the alternatives presented in this document. The public response indicated the principal concerns and issues to be the following.

Management Direction -- Most responses indicated a strong desire to see Katmai managed as a "wilderness park." Suggestions included restricting facilities to the perimeter of the park complex, dispersing developments throughout the park, maintaining small-scale developments, and limiting future developments by establishing a ceiling capacity. In keeping with the wilderness theme, it was suggested that certain areas of the park be zoned for nonmotorized uses only.

Visitor Use -- People generally requested provisions for more low-cost and low-impact activities. Facilities considered appropriate included canoe/kayak rentals and waterborne transportation to shuttle visitors. Expansion of the campgrounds and more campsites were also suggested.

Wildlife Management -- There was strong support for preserving wildlife resources. Bear management was a particular concern, and a variety of suggestions were made to reduce potential bear/visitor conflicts. Fisheries management was also a major topic, and several people suggested limitations on catches. Generally, the wildlife was viewed as a principal feature of Katmai, and it was recommended that nothing be done to diminish or impair it.

Cooperative Planning -- It was widely recommended that the Park Service maintain communications with the various organizations, communities, and agencies in the Katmai region during the planning project. The general management plan should be consistent with other ongoing efforts.

Aircraft Activities -- Many people thought that restricting aircraft takeoffs and landings in some locations was necessary to avoid disturbing wildlife and backcountry users. However, most respondents viewed an aircraft taxi system as a valid means of access into the park.

General Development -- In support of Katmai's wilderness characteristics, most people recommended only limited development. A particular concern was that no roads be built.

Following the definition of the issues, alternative packages were developed and presented in a July 1983 newsletter that was mailed to interested parties. Public workshops were conducted in King Salmon, Naknek, and Anchorage. The public responses were then analyzed and used in selecting the proposed plan. The reaction to the alternatives was equally divided, with all receiving substantial support. The proposed plan was selected based on the feasibility of implementation, cost, low degree of environmental impact, and the fact that it would resolve the more pressing problems at Katmai.

CULTURAL RESOURCE CONSULTATIONS

The National Park Service has requested the participation of the Advisory Council on Historic Preservation and the Alaska state historic preservation officer during the preparation of this plan, in accordance with the programmatic memorandum of agreement (revised in September 1981) between the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers. Initial meetings were held in Anchorage in July 1981 between the Park Service, the state historic preservation officer, and the Advisory Council to discuss coordination and consultation procedures for all Alaska general management plans, including Katmai. Subsequently, the Alaska Regional Office transmitted copies of the "Task Directive" for the Katmai general management plan, plus all other public information documents, to both the state historic preservation officer and the Advisory Council, and several meetings have been held with the state historic preservation officer to discuss this plan. The Advisory Council attended planning meetings in Denver in September 1981, and in February, May, and August 1982. The advice and consultation of these offices will continue to be requested as the plan progresses, and they will be invited to attend all future public meetings.

A thorough effort has been made to identify all native corporations, local native American groups, and individuals who would be interested in participating in this planning effort and who have traditional ties with the park. These individuals and groups have been put on the park's mailing list and will continue to be invited to all public meetings. They will also be sent copies of all public information documents for review and comment.

Copies of this draft document will be distributed to agencies and organizations concerned with management of national park system areas in general and Katmai National Park and Preserve in particular. Copies will also be sent to private individuals on the park's mailing list for review and comment.



APPENDIXES / REFERENCES CITED /
PLANNING TEAM

APPENDIX A: FINAL RULES ON PUBLIC USES OF
NATIONAL PARK SYSTEM UNITS IN ALASKA
(36 CFR 13)

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**PART 13—NATIONAL PARK SYSTEM
UNITS IN ALASKA**

Subpart A—Public Use and Recreation

Sec.

- 13.1 Definitions.
- 13.2 Applicability and scope.
- 13.3 Penalties.
- 13.4 Information collection.
- 13.10 Snowmachines.
- 13.11 Motorboats.
- 13.12 Nonmotorized surface transportation.
- 13.13 Aircraft.
- 13.14 Off-road vehicles.
- 13.15 Access to inholdings.
- 13.16 Temporary access.
- 13.17 Cabins and other structures.
- 13.18 Camping and picnicking.
- 13.19 Weapons, traps and nets.
- 13.20 Preservation of natural features.
- 13.21 Taking of fish and wildlife.
- 13.22 Unattended or abandoned property.
- 13.30 Closure procedures.
- 13.31 Permits.

Subpart B—Subsistence

- 13.40 Purpose and policy.
- 13.41 Applicability.
- 13.42 Definitions.
- 13.43 Determination of resident zones.
- 13.44 Subsistence permits for persons who permanently reside outside a resident zone.
- 13.45 Prohibition on aircraft use.
- 13.46 Use of snowmobiles, motorboats, dog teams, and other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses.
- 13.47 Subsistence fishing.
- 13.48 Subsistence hunting and trapping.
- 13.49 Subsistence use of timber and plant material.
- 13.50 Closure to subsistence uses.
- 13.51 Application procedures for subsistence permits and aircraft exceptions.

**Subpart C—Special Regulations—Specific
Park Areas in Alaska**

- 13.60 Aniakchak National Monument and Preserve.
- 13.61 Bering Land Bridge National Preserve.
- 13.62 Cape Krusenstern National Monument.
- 13.63 Denali National Park and Preserve.
- 13.64 Gates of the Arctic National Park and Preserve.
- 13.65 Glacier Bay National Park and Preserve.
- 13.66 Katmai National Park and Preserve.
- 13.67 Kenai Fjords National Park.
- 13.68 Klondike Gold Rush National Historical Park.
- 13.69 Kobuk Valley National Park.

Sec.

- 13.70 Lake Clark National Park and Preserve.
- 13.71 Noatak National Preserve.
- 13.72 Sitka National Historical Park.
- 13.73 Wrangell-St. Elias National Park and Preserve.
- 13.74 Yukon-Charley Rivers National Preserve.

Authority: Sec. 3 of the Act of August 15, 1916 (39 Stat. 535, as amended (16 U.S.C. 3); 16 U.S.C. 1, 1a-1, 1c, 462); Alaska National Interest Lands Conservation Act (ANILCA), 94 Stat. 2371 and 1281; Pub. L. No. 96-487 (December 2, 1980); and the Paperwork Reduction Act of 1980, 94 Stat. 2812, Pub. L. No. 96-511.

Subpart A—Public Use and Recreation

§ 13.1 Definitions.

The following definitions shall apply to all regulations contained in this part:

(a) The term "adequate and feasible access" means a reasonable method and route of pedestrian or vehicular transportation which is economically practicable for achieving the use or development desired by the applicant on his/her non-federal land or occupancy interest, but does not necessarily mean the least costly alternative.

(b) The term "aircraft" means a machine or device that is used or intended to be used to carry persons or objects in flight through the air, including, but not limited to airplanes, helicopters and gliders.

(c) The term "ANILCA" means the Alaska National Interest Lands Conservation Act (94 Stat. 2371; Pub. L. 96-487 (December 2, 1980)).

(d) The term "carry" means to wear, bear or carry on or about the person and additionally, in the case of firearms, within or upon a device or animal used for transportation.

(e) The term "downed aircraft" means an aircraft that as a result of mechanical failure or accident cannot take off.

(f) The term "firearm" means any loaded or unloaded pistol, revolver, rifle, shotgun or other weapon which will or is designated to or may readily be converted to expel a projectile by the action of expanded gases, except that it does not include a pistol or rifle powered by compressed gas. The term "firearm" also includes irritant gas devices.

(g) The term "fish and wildlife" means any member of the animal kingdom,

including without limitation any mammal, fish, bird (including any migratory, nonmigratory or endangered bird for which protection is also afforded by treaty or other international agreement), amphibian, reptile, mollusk, crustacean, arthropod, or other invertebrate, and includes any part, produce, egg, or offspring thereof, or the dead body or part thereof.

(h) The term "fossil" means any remains, impression, or trace of any animal or plant of past geological ages that has been preserved, by natural processes, in the earth's crust.

(i) The term "gemstone" means a silica or igneous mineral including, but not limited to (1) geodes, (2) petrified wood, and (3) jade, agate, opal, garnet, or other mineral that when cut and polished is customarily used as jewelry or other ornament.

(j) The term "National Preserve" shall include the following areas of the National Park System:

Alagnak National Wild and Scenic River, Aniakchak National Preserve, Bering Land Bridge National Preserve, Denali National Preserve, Gates of the Arctic National Preserve, Glacier Bay National Preserve, Katmai National Preserve, Lake Clark National Preserve, Noatak National Preserve, Wrangell-St. Elias National Preserve, and Yukon-Charley National Preserve.

(k) The term "net" means a seine, weir, net wire, fish trap, or other implement designed to entrap fish, except a landing net.

(l) The term "off-road vehicle" means any motor vehicle designed for or capable of crosscountry travel on or immediately over land, water, sand, snow, ice, marsh, wetland or other natural terrain, except snowmachines or snowmobiles as defined in this chapter.

(m) The term "park areas" means lands and waters administered by the National Park Service within the State of Alaska.

(n) The term "person" means any individual, firm, corporation, society, association, partnership, or any private or public body.

(o) The term "possession" means exercising dominion or control, with or without ownership, over weapons, traps, nets or other property.

(p) The term "public lands" means lands situated in Alaska which are federally owned lands, except—

(1) land selections of the State of Alaska which have been tentatively approved or validly selected under the Alaska Statehood Act (72 Stat. 339) and lands which have been confirmed to, validly selected by, or granted to the Territory of Alaska or the State under any other provision of Federal law;

(2) land selections of a Native Corporation made under the Alaska Native Claims Settlement Act (85 Stat. 688) which have not been conveyed to a Native Corporation, unless any such selection is determined to be invalid or is relinquished; and

(3) lands referred to in section 19(b) of the Alaska Native Claims Settlement Act.

(q) The term "snowmachine" or "snowmobile" means a self-propelled vehicle intended for off-road travel primarily on snow having a curb weight of not more than 1,000 pounds (450 kg), driven by a track or tracks in contact with the snow and steered by a ski or skis on contact with the snow.

(r) The term "Superintendent" means any National Park Service official in charge of a park area, the Alaska Regional Director of the National Park Service, or an authorized representative of either.

(s) The term "take" or "taking" as used with respect to fish and wildlife, means to pursue, hunt, shoot, trap, net, capture, collect, kill, harm, or attempt to engage in any such conduct.

(t) The term "temporary" means a continuous period of time not to exceed 12 months, except as specifically provided otherwise.

(u) The term "trap" means a snare, trap, mesh, or other implement designed to entrap animals other than fish.

(v) The term "unloaded" means there is no unexpended shell or cartridge in the chamber or magazine of a firearm; bows, crossbows and spearguns are stored in such a manner as to prevent their ready use; muzzle-loading weapons do not contain a powder charge; and any other implement capable of discharging a missile into the air or under the water does not contain a missile or similar device within the loading or discharging mechanism.

(w) The term "weapon" means a firearm, compressed gas or spring powered pistol or rifle, bow and arrow, crossbow, blow gun, speargun, hand thrown spear, slingshot, explosive device, or any other implement designed to discharge missiles into the air or under the water.

§ 13.2 Applicability and scope.

(a) The regulations contained in this Part 13 are prescribed for the proper use and management of park areas in Alaska and supplement the general regulations of this chapter. The general regulations contained in this chapter are applicable except as modified by this Part 13.

(b) Subpart A of this Part 13 contains regulations applicable to park areas. Such regulations amend in part the

general regulations contained in this chapter. The regulations in Subpart A govern use and management, including subsistence activities, within the park areas, except as modified by Subparts B or C.

(c) Subpart B of this Part 13 contains regulations applicable to subsistence activities. Such regulations apply to park areas except Kenai Fjords National Park, Katmai National Park, Glacier Bay National Park, Klondike Gold Rush National Historical Park, Sitka National Historical Park, and parts of Denali National Park. The regulations in Subpart B amend in part the general regulations contained in this chapter and the regulations contained in Subpart A of this Part 13.

(d) Subpart C of this Part 13 contains special regulations for specific park areas. Such regulations amend in part the general regulations contained in this chapter and the regulations contained in Subparts A and B of this Part 13.

(e) The regulations contained in this Part 13 are applicable only on federally owned lands within the boundaries of any park area. For purposes of this part, "federally owned lands" means land interests held or retained by the United States, but does not include those land interests: (1) Tentatively approved, legislatively conveyed, or patented to the State of Alaska; or (2) interim conveyed or patented to a Native Corporation or person.

§ 13.3 Penalties.

Any person convicted of violating any provision of the regulations contained in this Part 13, or as the same may be amended or supplemented, may be punished by a fine not exceeding \$500 or by imprisonment not exceeding 6 months, or both, and may be adjudged to pay all costs of the proceedings (16 U.S.C. 3).

§ 13.4 Information collection.

The information collection requirements contained in §§ 13.13, 13.14, 13.15, 13.16, 13.17, 13.31, 13.44, 13.45, 13.49, and 13.51 have been approved by the Office of Management and Budget under 44 U.S.C. 3507 and assigned clearance number 1024-0015. The information is being collected to solicit information necessary for the Superintendent to issue permits and other benefits. This information will be used to grant statutory or administrative benefits. In all sections except 13.13, the obligation to respond is required to obtain a benefit. In § 13.13, the obligation to respond is mandatory.

§ 13.10 Snowmachines.

(a) The use of snowmachines (during periods of adequate snow cover or frozen river conditions) for traditional activities (where such activities are permitted by ANILCA or other law) and for travel to and from villages and homesites, is permitted within park areas, except where such use is prohibited or otherwise restricted by the Superintendent in accordance with the provisions of § 13.30. Nothing in this section affects the use of snowmobiles by local rural residents engaged in subsistence uses as authorized by § 13.46.

(b) For the purposes of this section "adequate snow cover" shall mean snow of sufficient depth to protect the underlying vegetation and soil.

§ 13.11 Motorboats.

Motorboats may be operated on all park area waters, except where such use is prohibited or otherwise restricted by the Superintendent in accordance with the provisions of § 13.30, or § 7.23(b)-(f) of this chapter. Nothing in this section affects the use of motorboats by local rural residents engaged in subsistence uses as authorized by § 13.46.

§ 13.12 Nonmotorized surface transportation.

The use of nonmotorized surface transportation such as domestic dogs, horses and other pack or saddle animals is permitted in park areas except where such use is prohibited or otherwise restricted by the Superintendent in accordance with the provisions of § 13.30. Nothing in this section affects the use of nonmotorized surface transportation by local rural residents engaged in subsistence uses as authorized by § 13.46.

§ 13.13 Aircraft.

(a) Fixed-wing aircraft may be landed and operated on lands and waters within park areas, except where such use is prohibited or otherwise restricted by the Superintendent in accordance with this section. The use of aircraft for access to or from lands and waters within a national park or monument for purposes of taking fish and wildlife for subsistence uses therein is prohibited as set forth in § 13.45.

(b) In imposing any prohibitions or restrictions on fixed-wing aircraft use the Superintendent shall: (1) Comply with the procedures set forth in § 13.30; (2) publish notice of prohibitions or restrictions as "Notices to Airmen" issued by the Department of Transportation; and (3) publish permanent prohibitions or restrictions as a regulatory notice in the United States

Government Flight Information Service "Supplement Alaska."

(c) Except as provided in paragraph (d) of this section, the owners of any aircraft downed after December 2, 1980, shall remove the aircraft and all component parts thereof in accordance with procedures established by the Superintendent. In establishing a removal procedure, the Superintendent is authorized to: (1) Establish a reasonable date by which aircraft removal operations must be complete; and (2) determine times and means of access to and from the downed aircraft.

(d) The Superintendent may waive the requirements of § 13.12(c) upon a determination that: (1) The removal of downed aircraft would constitute an unacceptable risk to human life; or (2) the removal of a downed aircraft would result in extensive resource damage; or (3) the removal of a downed aircraft is otherwise impracticable or impossible.

(e) Salvaging, removing, possessing, or attempting to salvage, remove or possess any downed aircraft or component parts thereof is prohibited, except in accordance with a removal procedure established under paragraph (c) of this section. *Provided, however,* That the owner or an authorized representative thereof may remove valuable component parts from a downed aircraft at the time of rescue without a permit.

(f) The use of a helicopter in any park area, other than at designated landing areas (see Subpart C regulations for each park area) pursuant to the terms and conditions of a permit issued by the Superintendent, is prohibited.

§ 13.14 Off-road vehicles.

(a) The use of off-road vehicles in locations other than established roads and parking areas is prohibited, except on routes or in areas designated by the Superintendent or pursuant to a valid permit as prescribed in paragraph (c) of this section or in § 13.15 or § 13.16. Such designations shall be made in accordance with procedures in this section. Nothing in this section affects the use of off-road vehicles by local rural residents engaged in subsistence as authorized by § 13.46.

(b)(1) The Superintendent's determination of whether to designate a route or area for off-road vehicle use shall be governed by Executive Order 11644, as amended.

(2) Route or area designations shall be published in the "Federal Register."

(3) Notice of routes or areas on which off-road travel is permitted shall be in accordance with the provisions of § 13.30(f).

(4) The closure or restrictions on use of designated routes or areas to off-road vehicles use shall be in accordance with the provisions of § 13.30.

(c) The Superintendent is authorized to issue permits for the use of off-road vehicles on existing off-road vehicle trails located in park areas (other than areas designated as part of the National Wilderness Preservation System) upon a finding that such off-road vehicle use would be compatible with park purposes and values. The Superintendent shall include in any permit such stipulations and conditions as are necessary for the protection of park purposes and values.

§ 13.15 Access to inholdings.

(a) *Purpose.* A permit for access to inholdings pursuant to this section is required only where adequate and feasible access is not affirmatively provided without a permit under §§ 13.10-13.14 of these regulations. Thus, it is the purpose of this section to ensure adequate and feasible access across a park area for any person who has a valid property or occupancy interest in lands within or effectively surrounded by a park area or other lands listed in section 1110(b) of ANILCA.

(b) *Application and Administration.* (1) Applications for a permit designating methods and routes of access across park areas not affirmatively provided for in this part shall be submitted to the Superintendent having jurisdiction over the affected park area as specified under § 13.31.

(2) Except as provided in paragraph (c) of this section, the access permit application shall contain the name and address of the applicant, documentation of the relevant property or occupancy interest held by the applicant (including for 1872 Mining Law claimants a copy of the location notice and recordations required under the 1872 Mining Law and 43 U.S.C. 1744), a map or physical description of the relevant property or occupancy interest, a map or physical description of the desired route of access, a description of the desired method of access, and any other information necessary to determine the adequacy and feasibility of the route or method of access and its impact on the natural or other values of the park area.

(3) The Superintendent shall specify in a nontransferable permit, adequate and feasible routes and methods of access across park areas for any person who meets the criteria of paragraph (a) of this section. The Superintendent shall designate the routes and methods desired by the applicant unless it is determined that:

(i) The route or method of access would cause significant adverse impacts on natural or other values of the park area, and adequate and feasible access otherwise exists; or

(ii) The route or method of access would jeopardize public health and safety, and adequate and feasible access otherwise exists.

(4) If the Superintendent makes one of the findings described in paragraph (b)(3) of this section, he/she shall specify such other alternate methods and routes of access as will provide the applicant adequate and feasible access, while minimizing damage to natural and other values of the park area.

(5) Any person holding an access permit shall notify the Superintendent of any significant change in the method or level of access from that occurring at the time of permit issuance. In such cases, the Superintendent may modify the terms and conditions of the permit, provided that the modified permit also assures adequate and feasible access under the standards of paragraph (b)(3) of this section.

(6) Routes and methods of access permitted pursuant to this section shall be available for use by guests and invitees of the permittee.

(c) *Access requiring permanent improvements.* (1) Application form and procedure. Any application for access to an inholding which proposes the construction or modification of an improved road (e.g., construction or modification of a permanent, year-round nature, and which involves substantial alteration of the terrain or vegetation, such as grading, gravelling of surfaces, concrete bridges, or other such construction or modification), or any other permanent improvement on park area lands qualifying as a "transportation or utility system" under Section 1102 of ANILCA, shall be submitted on the consolidated application form specified in Section 1104(h) of ANILCA, and processed in accordance with the procedures of Title XI of ANILCA.

(2) Decision-making standard. (i) If the permanent improvement is required for adequate and feasible access to the inholding (e.g., improved right-of-way or landing strip), the permit granting standards of paragraph (b) of this section shall apply.

(ii) If the permanent improvement is not required as part of the applicant's right to adequate and feasible access to an inholding (e.g., pipeline, transmission line), the permit granting standards of Sections 1104-1107 of ANILCA shall apply.

(d) *Clarification of the Applicability of 36 CFR Part 9.* (1) 1872 Mining Law

Claims and 36 CFR Subpart 9A. Since section 1110(b) of ANILCA guarantees adequate and feasible access to valid mining claims within park areas notwithstanding any other law, and since the 36 CFR 9.3 requirement for an approved plan of operations prior to the issuance of an access permit may interfere with needed access, 36 CFR 9.3 is no longer applicable in Alaska park areas. However, holders of patented or unpatented mining claims under the 1872 Mining Law (30 U.S.C. 22 *et seq.*) should be aware that 36 CFR 9.9, 9.10 independently require an approved plan of operations prior to conducting mining operations within a park area (except that no plan of operations is required for patented claims where access is not across federally-owned parklands).

(2) Non-Federal Oil and Gas Rights and 36 CFR Subpart 9B. Since section 1110(b) of ANILCA guarantees adequate and feasible access to park area inholdings notwithstanding any other law, and since 36 CFR Subpart 9B was predicated on the park area Superintendent's discretion to restrict and condition such access, 36 CFR Subpart 9B is no longer applicable in Alaska park areas.

§ 13.16 Temporary access.

(a) *Applicability.* This section is applicable to State and private landowners who desire temporary access across a park area for the purposes of survey, geophysical, exploratory and other temporary uses of such nonfederal lands, and where such temporary access is not affirmatively provided for in §§ 13.10-13.15. State and private landowners meeting the criteria of § 13.15(a) are directed to utilize the procedures of § 13.15 to obtain temporary access.

(b) *Application.* A landowner requiring temporary access across a park area for survey, geophysical, exploratory or similar temporary activities shall apply to the Superintendent for an access permit and shall provide the relevant information described in section 13.15(b)(2), concerning the proposed access.

(c) *Permit standards, stipulations and conditions.* The Superintendent shall grant the desired temporary access whenever he/she determines that such access will not result in permanent harm to park area resources. The Superintendent shall include in any permit granted such stipulations and conditions on temporary access as are necessary to ensure that the access granted would not be inconsistent with the purposes for which the park area was reserved and to ensure that no

permanent harm will result to park area resources.

(d) *Definition.* For the purposes of this section, "temporary access" shall mean limited, short-term (*i.e.*, up to one year from issuance of the permit) access, which does not require permanent facilities for access, to undeveloped State or private lands.

§ 13.17 Cabins and other structures.

(a) *Purpose.* It is the purpose of this section to provide procedures and guidance for those occupying and using existing cabins and those wishing to construct new cabins within park areas.

(b) *Existing cabins or other structures.* (1) This subsection applies to all park areas in Alaska except Klondike Gold Rush National Historical Park, Sitka National Historical Park and the former Mt. McKinley National Park, Glacier Bay National Monument and Katmai National Monument.

(2) Cabins or other structures existing prior to December 18, 1973, may be occupied and used by the claimants to these structures pursuant to a nontransferable, renewable permit. This use and occupancy shall be for terms of five years. *Provided, however,* That the claimant to the structure, by application:

(i) Reasonably demonstrates by affidavit, bill of sale or other documentation proof of possessory interest or right of occupancy in the cabin or structure;

(ii) Submits an acceptable photograph or sketch which accurately depicts the cabin or structure and a map showing its geographic location;

(iii) Agrees to vacate and remove all personal property from the cabin or structure upon expiration of the permit;

(iv) Acknowledges in the permit that he/she has no interest in the real property on which the cabin or structure is located; and

(v) Submits a listing of the names of all immediate family members residing in the cabin or structure.

Permits issued under the provisions of this paragraph shall be renewed every five years until the death of the last immediate family member of the claimant residing in the cabin or structure under permit. Renewal will occur unless the Superintendent determines after notice and hearing, and on the basis of substantial evidence in the administrative record as a whole, that the use under the permit is causing or may cause significant detriment to the principal purposes for which the park area was established. The Superintendent's decision may be appealed pursuant to the provisions of 43 CFR 4.700.

(3) Cabins or other structures, the occupancy or use of which began between December 13, 1973, and December 1, 1978, may be used and occupied by the claimant to these structures pursuant to a nontransferable, nonrenewable permit. This use and occupancy shall be for a maximum term of 1 year: *Provided, however*, That the claimant, by application, complies with § 13.17(c)(1) (i) through (iv) above. Permits issued under the provisions of this paragraph may be extended by the Superintendent, subject to reasonable regulations, for a period not to exceed one year for such reasons as the Superintendent deems equitable and just.

(4) Cabins or other structures, construction of which began after December 1, 1978, shall not be available for use and occupancy, unless authorized under the provisions of paragraph (d) of this section.

(5) Cabins or other structures, not under permit, shall be used only for official government business: *Provided, however*, That during emergencies involving the safety of human life, or where designated for public use by the Superintendent through the posting of signs, these cabins may be used by the general public.

(c) *New Cabins or Other Structures Necessary for Subsistence Uses or Otherwise Authorized by Law.* The Superintendent may issue a permit under such conditions as he/she may prescribe for the construction, reconstruction, temporary use, occupancy, and maintenance of new cabins or other structures when he/she determines that the use is necessary to accommodate reasonably subsistence uses or is otherwise authorized by law. In determining whether to permit the use, occupancy, construction, reconstruction or maintenance of cabins or other structures, the Superintendent shall be guided by factors such as other public uses, public health and safety, environmental and resource protection, research activities, protection of cultural or scientific values, subsistence uses, endangered or threatened species conservation and other management considerations necessary to ensure that the activities authorized pursuant to this section are compatible with the purposes for which the park area was established.

(d) *Existing Cabin Leases or Permits.* Nothing in this section shall preclude the renewal or continuation of valid leases or permits in effect as of December 2, 1980, for cabins, homesites, or similar structures on federally owned lands. Unless the Superintendent issues specific findings, following notice and

an opportunity for the leaseholder or permittee to respond, that renewal or continuation of such valid permit or lease constitutes a direct threat or a significant impairment to the purposes for which the park area was established, he/she shall renew such valid leases or permits upon their expiration in accordance with the provisions of the original lease or permit subject to such reasonable regulations as he/she prescribe in keeping with the management objectives of the park area. Subject to the provisions of the original lease or permit, nothing in this paragraph shall necessarily preclude the Superintendent from transferring such a lease or permit to another person at the election or death of the original permittee or leasee.

§ 13.18 Camping and picnicking.

(a) *Camping.* Camping is permitted in park areas except where such use is prohibited or otherwise restricted by the Superintendent in accordance with the provisions of § 13.30, or as set forth for specific park areas in Subpart C of this part.

(b) *Picnicking.* Picnicking is permitted in park areas except where such activity is prohibited by the posting of appropriate signs.

§ 13.19 Weapons, traps and nets.

(a) This section applies to all park areas in Alaska except Klondike Gold Rush National Historical Park, Sitka National Historical Park and the former Mt. McKinley National Park, Glacier Bay National Monument and Katmai National Monument.

(b) Firearms may be carried within park areas in accordance with applicable Federal and State laws, except where such carrying is prohibited or otherwise restricted pursuant to § 13.30.

(c) Traps, bows and other implements authorized by State and Federal law for the taking of fish and wildlife may be carried within National Preserves only during those times when the taking of fish and wildlife is authorized by applicable law or regulation.

(d) In addition to the authorities provided in paragraphs (b) and (c) of this section, weapons (other than firearms) traps and nets may be possessed within park areas provided such weapons, traps or nets are within or upon a device or animal used for transportation and are unloaded and cased or otherwise packed in such a manner as to prevent their ready use while in a park area.

(e) Notwithstanding the provisions of this section, local rural residents who are authorized to engage in subsistence

uses, including the taking of wildlife pursuant to § 13.48, may use, possess, or carry traps, nets and other weapons in accordance with applicable State and Federal laws.

§ 13.20 Preservation of natural features.

(a) This section applies to all park areas in Alaska except Klondike Gold Rush National Historical Park, Sitka National Historical Park, the former Mt. McKinley National Park, Glacier Bay National Monument, and Katmai National Monument.

(b) *Renewable Resources.* The gathering or collecting, by hand and for personal use only, of the following renewable resources is permitted:

(1) Natural plant food items, including fruits, berries and mushrooms, but not including threatened or endangered species;

(2) Driftwood and uninhabited seashells;

(3) Such plant materials and minerals as are essential to the conduct of traditional ceremonies by Native Americans; and

(4) Dead or downed wood for use in fires within park areas.

(c) *Rocks and Minerals.* Surface collection, by hand (including hand-held gold pans) and for personal recreational use only, of rocks and minerals is permitted: *Provided, however*, That (1) collection of silver, platinum, gemstones and fossils is prohibited, and (2) collection methods which may result in disturbance of the ground surface, such as the use of shovels, pickaxes, sluice boxes, and dredges, are prohibited.

(d) *Closure and Notice.* Under conditions where it is found that significant adverse impact on park resources, wildlife populations, subsistence uses, or visitor enjoyment of resources will result, the Superintendent shall prohibit the gathering or otherwise restrict the collecting of these items. Portions of a park area in which closures or restrictions apply shall be (1) published in at least one newspaper of general circulation in the State and designated on a map which shall be available for public inspection in the office of the Superintendent, or (2) designated by the posting of appropriate signs, or (3) both.

(e) *Subsistence.* Nothing in this section shall apply to local rural residents authorized to take renewable resources.

§ 13.21 Taking of fish and wildlife.

(a) *Subsistence.* Nothing in this section shall apply to the taking of fish and wildlife for subsistence uses.

(b) *Fishing.* Fishing is permitted in all park areas in accordance with applicable State and Federal law, and such laws are hereby adopted and made a part of these regulations to the extent they are not inconsistent with § 2.13 of this chapter. With respect to the Cape Krusenstern National Monument, the Malaspina Glacier Forelands area of the Wrangell-St. Elias National Preserve, and the Dry Bay area of Glacier Bay National Preserve, the exercise of valid commercial fishing rights or privileges obtained pursuant to existing law—including any use of park area lands for campsites, cabins, motorized vehicles, and aircraft landings on existing airstrips which is directly incident to the exercise of such rights or privileges—may continue: *Provided, however,* That the Superintendent may restrict the use of park area lands directly incident to the exercise of these rights or privileges if he/she determines, after conducting a public hearing in the affected locality, that such use of park area lands constitutes a significant expansion of the use of park area lands beyond the level of such use during 1979.

(c) *Hunting and Trapping.* Hunting and trapping are permitted in all National Preserves in accordance with applicable State and Federal law, and such laws are hereby adopted and made a part of these regulations: *Provided, however,* That engaging in trapping activities, as the employee of another person is prohibited.

(d) *Closures and Restrictions.* The Superintendent may prohibit or restrict the taking of fish or wildlife in accordance with the provisions of § 13.30. Except in emergency conditions, such restrictions shall take effect only after consultation with the appropriate State agency having responsibility over fishing, hunting, or trapping and representatives of affected users.

§ 13.22 Unattended or abandoned property.

(a) This section applies to all park areas in Alaska except Klondike Gold Rush National Historical Park and Sitka National Historical Park, or as further restricted for specific park areas in Subpart C of this part.

(b) Leaving any snowmachine, vessel, off-road vehicle or other personal property unattended for longer than 12 months without prior permission of the Superintendent is prohibited, and any property so left may be impounded by the Superintendent.

(c) The Superintendent may (1) designate areas where personal property may not be left unattended for any time period, (2) establish limits on the amount, and type of personal property

that may be left unattended, (3) prescribe the manner in which personal property may be left unattended, or (4) establish limits on the length of time personal property may be left unattended. Such designations and restrictions shall be (i) published in at least one newspaper of general circulation within the State, posted at community post offices within the vicinity affected, made available for broadcast on local radio stations in a manner reasonably calculated to inform residents in the affected community, and designated on a map which shall be available for public inspection at the office of the Superintendent, or (ii) designated by the posting of appropriate signs or (iii) both.

(d) In the event unattended property interferes with the safe and orderly management of a park area or is causing damage to the resources of the area, it may be impounded by the Superintendent at any time.

§ 13.30 Closure procedures.

(a) *Authority.* The Superintendent may close an area or restrict an activity on an emergency, temporary, or permanent basis.

(b) *Criteria.* In determining whether to close an area or restrict an activity on an emergency basis, the Superintendent shall be guided by factors such as public health and safety, resource protection, protection of cultural or scientific values, subsistence uses, endangered or threatened species conservation, and other management considerations necessary to ensure that the activity or area is being managed in a manner compatible with the purposes for which the park area was established.

(c) *Emergency Closures.* (1) Emergency closures or restrictions relating to the use of aircraft, snowmachines, motorboats, or nonmotorized surface transportation shall be made after notice and hearing; (2) emergency closures or restrictions relating to the taking of fish and wildlife shall be accompanied by notice and hearing; (3) other emergency closures shall become effective upon notice as prescribed in § 13.30(f); and (4) no emergency closure or restriction shall extend for a period exceeding 30 days, nor may it be extended.

(d) *Temporary closures or restrictions.* (1) Temporary closures or restrictions relating to the use of aircraft, snowmachines, motorboats, or nonmotorized surface transportation or to the taking of fish and wildlife, shall not be effective prior to notice and hearing in the vicinity of the area(s) directly affected by such closures or restrictions, and other locations as

appropriate; (2) other temporary closures shall be effective upon notice as prescribed in § 13.30(f); (3) temporary closures or restrictions shall not extend for a period exceeding 12 months and may not be extended.

(e) *Permanent closures or restrictions.* Permanent closures or restrictions shall be published as rulemaking in the **Federal Register** with a minimum public comment period of 60 days and shall be accompanied by public hearings in the area affected and other locations as appropriate.

(f) *Notice.* Emergency, temporary and permanent closures or restrictions shall be (1) published in at least one newspaper of general circulation in the State and in at least one local newspaper if available, posted at community post offices within the vicinity affected, made available for broadcast on local radio stations in a manner reasonably calculated to inform residents in the affected vicinity, and designated on a map which shall be available for public inspection at the office of the Superintendent and other places convenient to the public; or (2) designated by the posting of appropriate signs; or (3) both.

(g) *Openings.* In determining whether to open an area to public use or activity otherwise prohibited, the Superintendent shall provide notice in the **Federal Register** and shall, upon request, hold a hearing in the affected vicinity and other locations as appropriate prior to making a final determination.

(h) Except as otherwise specifically permitted under the provisions of this part, entry into closed areas or failure to abide by restrictions established under this section is prohibited.

§ 13.31 Permits.

(a) *Application.* (1) Application for a permit required by any section of this part shall be submitted to the Superintendent having jurisdiction over the affected park area, or in the absence of the Superintendent, the Regional Director. If the applicant is unable or does not wish to submit the application in written form, the Superintendent shall provide the applicant an opportunity to present the application orally and shall keep a record of such oral application.

(2) The Superintendent shall grant or deny the application in writing within 45 days. If this deadline cannot be met for good cause, the Superintendent shall so notify the applicant in writing. If the permit application is denied, the Superintendent shall specify in writing the reasons for the denial.

(b) *Denial and appeal procedures.* (1) An applicant whose application for a permit, required pursuant to this part, has been denied by the Superintendent has the right to have the application reconsidered by the Regional Director by contacting him/her within 180 days of the issuance of the denial. For purposes of reconsideration, the permit applicant shall present the following information:

(i) Any statement or documentation, in addition to that included in the initial application, which demonstrates that the applicant satisfies the criteria set forth in the section under which the permit application is made.

(ii) The basis for the permit applicant's disagreement with the Superintendent's findings and conclusions; and

(iii) Whether or not the permit applicant requests an informal hearing before the Regional Director.

(2) The Regional Director shall provide a hearing if requested by the applicant. After consideration of the written materials and oral hearing, if any, and within a reasonable period of time, the Regional Director shall affirm, reverse, or modify the denial of the Superintendent and shall set forth in writing the basis for the decision. A copy of the decision shall be forwarded promptly to the applicant and shall constitute final agency action.

Subpart B—Subsistence

§ 13.40 Purpose and policy.

(a) Consistent with the management of fish and wildlife in accordance with recognized scientific principles and the purposes for which each park area was established, designated, or expanded by ANILCA, the purpose of this subpart is to provide the opportunity for local rural residents engaged in a subsistence way of life to do so pursuant to applicable State and Federal law.

(b) Consistent with sound management principles, and the conservation of healthy populations of fish and wildlife, the utilization of park areas is to cause the least adverse impact possible on local rural residents who depend upon subsistence uses of the resources of the public lands in Alaska.

(c) Nonwasteful subsistence uses of fish, wildlife and other renewable resources by local rural residents shall be the priority consumptive uses of such resources over any other consumptive uses permitted within park areas pursuant to applicable State and Federal law.

(d) Whenever it is necessary to restrict the taking of a fish or wildlife

population within a park area for subsistence uses in order to assure the continued viability of such population or to continue subsistence uses of such population, the population shall be allocated among local rural residents engaged in subsistence uses in accordance with a subsistence priority system based on the following criteria:

(1) Customary and direct dependence upon the resource as the mainstay of one's livelihood;

(2) Local residency; and

(3) Availability of alternative resources.

(e) The State of Alaska is authorized to regulate the taking of fish and wildlife for subsistence uses within park areas to the extent such regulation is consistent with applicable Federal law, including but not limited to ANILCA.

(f) Nothing in this subpart shall be construed as permitting a level of subsistence use of fish and wildlife within park areas to be inconsistent with the conservation of healthy populations, and within a national park or monument to be inconsistent with the conservation of natural and healthy populations, of fish and wildlife.

§ 13.41 Applicability.

Subsistence uses by local rural residents are allowed pursuant to the regulations of this Subpart in the following park areas:

(a) In national preserves;

(b) In Cape Krusenstern National Monument and Kobuk Valley National Park;

(c) Where such uses are traditional (as may be further designated for each park or monument in Subpart C of this part) in Aniakchak National Monument, Gates of the Arctic National Park, Lake Clark National Park, Wrangell-St. Elias National Park, and the Denali National Park addition.

§ 13.42 Definitions.

(a) *Local rural resident.* (1) As used in this part with respect to national parks and monuments, the term "local rural resident" shall mean either of the following:

(i) Any person who has his/her primary, permanent home within the resident zone as defined by this section, and whenever absent from this primary, permanent home, has the intention of returning to it. Factors demonstrating the location of a person's primary, permanent home may include, but are not limited to, the permanent address indicated on licenses issued by the State of Alaska Department of Fish and Game, driver's license, and tax returns, and the location of registration to vote.

(ii) Any person authorized to engage in subsistence uses in a national park or monument by a subsistence permit issued pursuant to § 13.44.

(b) *Resident zone.* As used in this part, the term "resident zone" shall mean the area within, and the communities and areas near, a national park or monument in which persons who have customarily and traditionally engaged in subsistence uses within the national park or monument permanently reside. The communities and areas near a national park or monument included as a part of its resident zone shall be determined pursuant to § 13.43 and listed for each national park or monument in Subpart C of this part.

(c) *Subsistence uses.* As used in this part, the term "subsistence uses" shall mean the customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools or transportation; for the making and selling of handicraft articles out of nonedible byproducts of fish and wildlife resources taken for personal or family consumption; for barter or sharing for personal or family consumption; and for customary trade. For the purposes of this paragraph, the term—

(1) "Family" shall mean all persons related by blood, marriage, or adoption, or any person living within the household on a permanent basis; and

(2) "Barter" shall mean the exchange of fish or wildlife or their parts taken for subsistence uses—

(i) For other fish or game or their parts; or

(ii) For other food or for nonedible items other than money if the exchange is of a limited and noncommercial nature; and

(3) "Customary trade" shall be limited to the exchange of furs for cash (and such other activities as may be designated for a specific park area in Subpart C of this part).

§ 13.43 Determination of resident zones.

(a) A resident zone shall include—

(1) the area within a national park or monument, and

(2) the communities and areas near a national park or monument which contain significant concentrations of rural residents who, without using aircraft as a means of access for purposes of taking fish or wildlife for subsistence uses (except in extraordinary cases where no reasonable alternative existed), have customarily and traditionally engaged in subsistence uses within a national park or monument. For purposes of

determining "significant" concentrations, family members shall also be included.

(b) After notice and comment, including public hearing in the affected local vicinity, a community or area near a national park or monument may be—

(1) Added to a resident zone, or

(2) Deleted from a resident zone, when such community or area does or does not meet the criteria set forth in paragraph (a) of this section, as appropriate.

(c) For purposes of this section, the term "family" shall mean all persons living within a rural resident's household on a permanent basis.

§ 13.44 Subsistence permits for persons whose primary, permanent home is outside a resident zone.

(a) Any rural resident whose primary, permanent home is outside the boundaries of a resident zone of a national park or monument may apply to the appropriate Superintendent pursuant to the procedures set forth in § 13.51 for a subsistence permit authorizing the permit applicant to engage in subsistence uses within the national park or monument. The Superintendent shall grant the permit if the permit applicant demonstrates that.

(1) Without using aircraft as a means of access for purposes of taking fish and wildlife for subsistence uses, the applicant has (or is a member of a family which has) customarily and traditionally engaged in subsistence uses within a national park or monument; or

(2) The applicant is a local rural resident within a resident zone for another national park or monument, or meets the requirements of paragraph (1) of this section for another national park or monument, and there exists a pattern of subsistence uses (without use of an aircraft as a means of access for purposes of taking fish and wildlife for subsistence uses) between the national park or monument previously utilized by the permit applicant and the national park or monument for which the permit applicant seeks a subsistence permit.

(b) In order to provide for subsistence uses pending application for and receipt of a subsistence permit, until August 1, 1981, any rural resident whose primary permanent home is outside the boundaries of a resident zone of a national park or monument and who meets the criteria for a subsistence permit set forth in paragraph (a) of this section may engage in subsistence uses in the national park or monument without a permit in accordance with applicable State and Federal law. Effective August 1, 1981, however, such

rural resident must have a subsistence permit as required by paragraph (a) of this section in order to engage in subsistence uses in the national park or monument.

(c) For purposes of this section, the term "family" shall mean all persons living within a rural resident's household on a permanent basis.

§ 13.45 Prohibition of aircraft use.

(a) Notwithstanding the provisions of § 13.12 the use of aircraft for access to or from lands and waters within a national park or monument for purposes of taking fish or wildlife for subsistence uses within the national park or monument is prohibited except as provided in this section.

(b) *Exceptions.* (1) In extraordinary cases where no reasonable alternative exists, the Superintendent shall permit, pursuant to specified terms and conditions, a local rural resident of an "exempted community" to use aircraft for access to or from lands and water within a national park or monument for purposes of taking fish or wildlife for subsistence uses.

(i) A community shall qualify as an "exempted community" if, because of the location of the subsistence resources upon which it depends and the extraordinary difficulty of surface access to these subsistence resources, the local rural residents who permanently reside in the community have no reasonable alternative to aircraft use for access to these subsistence resources.

(ii) A community which is determined, after notice and comment (including public hearing in the affected local vicinity), to meet the description of an "exempted community" set forth in paragraph (b)(1) of this section shall be included in the appropriate special regulations for each park and monument set forth in Subpart C of this part.

(iii) A community included as an "exempted community" in Subpart C of this part may be deleted therefrom upon a determination, after notice and comment (including public hearing in the affected local vicinity), that it does not meet the description of an "exempted community" set forth in paragraph (b)(1) of this section.

(2) Any local rural resident aggrieved by the prohibition on aircraft use set forth in this section may apply for an exception to the prohibition pursuant to the procedures set forth in § 13.51. In extraordinary cases where no reasonable alternative exists, the Superintendent may grant the exception upon a determination that the location of the subsistence resources depended upon and the difficulty of surface access

to these resources, or other emergency situation, requires such relief.

(c) Nothing in this section shall prohibit the use of aircraft for access to lands and waters within a national park or monument for purposes of engaging in any activity allowed by law other than the taking of fish and wildlife. Such activities include, but are not limited to, transporting supplies.

§ 13.46 Use of snowmobiles, motorboats, dog teams, and other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses.

(a) Notwithstanding any other provision of this chapter, the use of snowmobiles, motorboats, dog teams, and other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses is permitted within park areas except at those times and in those areas restricted or closed by the Superintendent.

(b) The Superintendent may restrict or close a route or area to use of snowmobiles, motorboats, dog teams, or other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses if the Superintendent determines that such use is causing or is likely to cause an adverse impact on public health and safety, resource protection, protection of historic or scientific values, subsistence uses, conservation of endangered or threatened species, or the purposes for which the park area was established.

(c) No restrictions or closures shall be imposed without notice and a public hearing in the affected vicinity and other locations as appropriate. In the case of emergency situations, restrictions or closures shall not exceed sixty (60) days and shall not be extended unless the Superintendent establishes, after notice and public hearing in the affected vicinity and other locations as appropriate, that such extension is justified according to the factors set forth in paragraph (b) of this section. Notice of the proposed or emergency restrictions or closures and the reasons therefor shall be published in at least one newspaper of general circulation within the State and in at least one local newspaper if appropriate, and information about such proposed or emergency actions shall also be made available for broadcast on local radio stations in a manner reasonably calculated to inform local rural residents in the affected vicinity. All restrictions and closures shall be designated on a map which shall be available for public inspection at the office of the

Superintendent of the affected park area and the post office or postal authority of every affected community within or near the park area, or by the posting of signs in the vicinity of the restrictions or closures, or both.

(d) Motorboats, snowmobiles, dog teams, and other means of surface transportation traditionally employed by local rural residents engaged in subsistence uses shall be operated (1) in compliance with applicable State and Federal law, (2) in such a manner as to prevent waste or damage to the park areas, and (3) in such a manner as to prevent the herding, harassment, hazing or driving of wildlife for hunting or other purposes.

(e) At all times when not engaged in subsistence uses, local rural residents may use snowmobiles, motorboats, dog teams, and other means of surface transportation in accordance with §§ 13.10, 13.11, 13.12, and 13.14, respectively.

§ 13.47 Subsistence fishing.

Fish may be taken by local rural residents for subsistence uses in park areas where subsistence uses are allowed in compliance with applicable State and Federal law, including the provisions of §§ 2.13 and 13.21 of this chapter: *Provided, however,* That local rural residents in park areas where subsistence uses are allowed may fish with a net, seine, trap, or spear where permitted by State law. To the extent consistent with the provisions of this chapter, applicable State laws and regulations governing the taking of fish which are now or will hereafter be in effect are hereby incorporated by reference as a part of these regulations.

§ 13.48 Subsistence hunting and trapping

Local rural residents may hunt and trap wildlife for subsistence uses in park areas where subsistence uses are allowed in compliance with applicable State and Federal law. To the extent consistent with the provisions of this chapter, applicable State laws and regulations governing the taking of wildlife which are now or will hereafter be in effect are hereby incorporated by reference as a part of these regulations.

§ 13.49 Subsistence use of timber and plant material.

(a) Notwithstanding any other provision of this part, the non-commercial cutting of live standing timber by local rural residents for appropriate subsistence uses, such as firewood or house logs, may be permitted in park areas where subsistence uses are allowed as follows:

(1) For live standing timber of diameter greater than three inches at ground height, the Superintendent may permit cutting in accordance with the specifications of a permit if such cutting is determined to be compatible with the purposes for which the park area was established;

(2) For live standing timber of diameter less than three inches at ground height, cutting is permitted unless restricted by the Superintendent.

(b) The noncommercial gathering by local rural residents of fruits, berries, mushrooms, and other plant materials for subsistence uses, and the noncommercial gathering of dead or downed timber for firewood, shall be allowed without a permit in park areas where subsistence uses are allowed.

(c)(1) Notwithstanding any other provision of this part, the Superintendent, after notice and public hearing in the affected vicinity and other locations as appropriate, may temporarily close all or any portion of a park area to subsistence uses of a particular plant population only if necessary for reasons of public safety, administration, or to assure the continued viability of such population. For the purposes of this section, the term "temporarily" shall mean only so long as reasonably necessary to achieve the purposes of the closure.

(2) If the Superintendent determines that an emergency situation exists and that extraordinary measures must be taken for public safety or to assure the continued viability of a particular plant population, the Superintendent may immediately close all or any portion of a park area to the subsistence uses of such population. Such emergency closure shall be effective when made, shall be for a period not to exceed sixty (60) days, and may not subsequently be extended unless the Superintendent establishes, after notice and public hearing in the affected vicinity and other locations as appropriate, that such closure should be extended.

(3) Notice of administrative actions taken pursuant to this section, and the reasons justifying such actions, shall be published in at least one newspaper of general circulation within the State and at least one local newspaper if available, and information about such actions and reasons also shall be made available for broadcast on local radio stations in a manner reasonably calculated to inform local rural residents in the affected vicinity. All closures shall be designated on a map which shall be available for public inspection at the office of the Superintendent of the affected park area and the post office or postal authority of every affected

community within or near the park area, or by the posting of signs in the vicinity of the restrictions, or both.

§ 13.50 Closure to subsistence uses of fish and wildlife.

(a) Notwithstanding any other provision of this part, the Superintendent, after consultation with the State and adequate notice and public hearing in the affected vicinity and other locations as appropriate, may temporarily close all or any portion of a park area to subsistence uses of a particular fish or wildlife population only if necessary for reasons of public safety, administration, or to assure the continued viability of such population. For purposes of this section, the term "temporarily" shall mean only so long as reasonably necessary to achieve the purposes of the closure.

(b) If the Superintendent determines that an emergency situation exists and that extraordinary measures must be taken for public safety or to assure the continued viability of a particular fish or wildlife population, the Superintendent may immediately close all or any portion of a park area to the subsistence uses of such population. Such emergency closure shall be effective when made, shall be for a period not to exceed sixty (60) days, and may not subsequently be extended unless the Superintendent establishes, after notice and public hearing in the affected vicinity and other locations as appropriate, that such closure should be extended.

(c) Notice of administrative actions taken pursuant to this section, and the reasons justifying such actions, shall be published in at least one newspaper of general circulation within the State and in at least one local newspaper if available, and information about such actions and reasons also shall be made available for broadcast on local radio stations in a manner reasonably calculated to inform local rural residents in the affected vicinity. All closures shall be designated on a map which shall be available for public inspection at the office of the Superintendent of the affected park area and the post office or postal authority of every affected community within or near the park area, or by the posting of signs in the vicinity of the restrictions, or both.

§ 13.51 Application procedures for subsistence permits and aircraft exceptions.

(a) Any person applying for the subsistence permit required by § 13.44(a), or the exception to the prohibition on aircraft use provided by

§ 13.45(b)(2), shall submit his/her application to the Superintendent of the appropriate national park or monument. If the applicant is unable or does not wish to submit the application in written form, the Superintendent shall provide the applicant an opportunity to present the application orally and shall keep a record of such oral application. Each application must include (1) a statement which acknowledges that providing false information in support of the application is a violation of Section 1001 of Title 18 of the United States Code, and (2) additional statements or documentation which demonstrates that the applicant satisfies the criteria set forth in § 13.44(a) for a subsistence permit or § 13.45(b)(2) for the aircraft exception, as appropriate. Except in extraordinary cases for good cause shown, the Superintendent shall decide whether to grant or deny the application in a timely manner not to exceed forty-five (45) days following the receipt of the completed application. Should the Superintendent deny the application, he/she shall include in the decision a statement of the reasons for the denial and shall promptly forward a copy to the applicant.

(b) An applicant whose application has been denied by the Superintendent has the right to have his/her application reconsidered by the Alaska Regional Director by contacting the Regional Director within 180 days of the issuance of the denial. The Regional Director may extend the 180-day time limit to initiate a reconsideration for good cause shown by the applicant. For purposes of reconsideration, the applicant shall present the following information:

(1) Any statement or documentation, in addition to that included in the initial application, which demonstrates that the applicant satisfies the criteria set forth in paragraph (a) of this section;

(2) The basis for the applicant's disagreement with the Superintendent's findings and conclusions; and

(3) Whether or not the applicant requests an informal hearing before the Regional Director.

(c) The Regional Director shall provide a hearing if requested by the applicant. After consideration of the written materials and oral hearing, if any, and within a reasonable period of time, the Regional Director shall affirm, reverse, or modify the denial of the Superintendent and shall set forth in writing the basis for the decision. A copy of the decision shall be forwarded promptly to the applicant and shall constitute final agency action.

Subpart C—Special Regulations— Specific Park Areas in Alaska

§ 13.66 Katmai National Park and Preserve.

(a) [Reserved]

(b) *Fishing* (1) Fishing is permitted only with artificial lures; however, bait, as defined by regulations of the Alaska Department of Fish and Game, may be used from November 15 through March 31 of each year on the Naknek River from markers located just above Trefon's cabin downstream to the monument boundary.

(2) On the Brooks River between Brooks Lake and posted signs near Brooks Camp, fly fishing only is permitted.

[37 FR 17389, Aug. 26, 1972, as amended at 45 FR 61293, Sept. 16, 1980; 46 FR 31854, June 17, 1981; 48 FR 30295, June 30, 1983]

APPENDIX B: MANAGEMENT OBJECTIVES

Management objectives for Katmai National Park and Preserve are contained in the park's "Statement for Management." They were developed within the framework of existing laws, regulations, and policies applicable to this unit of the national park system. Management objectives that specifically bear on the proposed general management plan are listed below.

MANAGEMENT AND ADMINISTRATION

Work cooperatively with the state of Alaska, local governments, and private interests so that their land and water plans reflect consideration for the resources and purposes of the park and preserve.

Manage the upper 67 miles of the Alagnak River, including its two upper branches, consistent with the provisions of the Wild and Scenic Rivers Act.

Manage the new additions to the park and preserve in a manner that will protect their scenic, cultural, and natural values; provide for appropriate visitor use.

RESOURCE MANAGEMENT

Identify, protect, and perpetuate Katmai's outstanding wildlife, vegetation, water, and volcanic features in their wilderness environment.

Maintain the park and preserve as an area where the Alaskan brown bears can exist as naturally as possible with minimal adverse effects from humans.

Preserve the natural spawning conditions for the red salmon, rainbow trout, and other fish native to the park and preserve.

Manage the natural and physical resources of the park and preserve to ensure the perpetuation of the factors basic to the area's establishment.

Work cooperatively and interdependently with the Alaska Department of Fish and Game and the U.S. Fish and Wildlife Service in regulating consumptive uses of natural resources in Katmai National Preserve so as to maintain natural population dynamics.

Encourage and participate in research efforts to ensure adequate information for sound management decisions concerning the park/preserve's natural, cultural, and physical resources.

Identify, preserve, and protect the park/preserve's cultural resources, including the remains of early 20th century activities and the sites associated with earlier cultures in a manner consistent with historic preservation laws, NPS policies, and the purpose of the area. Particular

attention will be paid to the known locations, such as Fure's cabin, the village of Old Savonoski, and the Brooks River archeological district.

Locate and identify known historic and prehistoric sites and structures for possible designation to the National Register of Historic Places and Alaska Heritage Resource Survey.

VISITOR USE AND INTERPRETATION

Foster visitor understanding of and appreciation for the dramatic natural forces responsible for the park's volcanic features, Alaskan cultural history, and superlative fish and wildlife populations.

In accordance with the provisions of ANILCA, provide for sport hunting and trapping in the national preserve.

Provide visitors with adequate means of access to the park, consistent with the wilderness character of the area.

Interpret the park and preserve through nonsophisticated, highly personal techniques and programs, consistent with Katmai's visitor use pattern and physical resource values.

Encourage visitor activities that are appropriate to Katmai's natural environment, including backpacking, camping, hiking, sight-seeing, fishing, canoeing, and kayaking.

Through programs, informal talks, and backcountry permits, provide information to visitors to minimize camping impacts on natural areas.

APPENDIX C: ANILCA, SECTION 1301 (MANAGEMENT PLANS)
AND SECTION 1302 (LAND ACQUISITION AUTHORITY)

MANAGEMENT PLANS

SEC. 1301. (a) Within five years from the date of enactment of this Act, the Secretary shall develop and transmit to the appropriate Committees of the Congress a conservation and management plan for each of the units of the National Park System established or to which additions are made by this Act.

(b) NATIONAL PARK SERVICE PLAN REQUIREMENTS.—Each plan for a unit established, redesignated, or expanded by title II shall identify management practices which will carry out the policies of this Act and will accomplish the purposes for which the concerned National Park System unit was established or expanded and shall include at least the following:

(1) Maps indicating areas of particular importance as to wilderness, natural, historical, wildlife, cultural, archeological, paleontological, geological, recreational, and similar resources and also indicating the areas into which such unit will be divided for administrative purposes.

(2) A description of the programs and methods that will be employed to manage fish and wildlife resources and habitats, cultural, geological, recreational, and wilderness resources, and how each conservation system unit will contribute to overall resources management goals of that region. Such programs should include research, protection, restoration, development, and interpretation as appropriate.

(3) A description of any areas of potential or proposed development, indicating types of visitor services and facilities to be provided, the estimated costs of such services and facilities, and whether or not such services and facilities could and should be provided outside the boundaries of such unit.

(4) A plan for access to, and circulation within, such unit, indicating the type and location of transportation routes and facilities, if any.

(5) A description of the programs and methods which the Secretary plans to use for the purposes of (A) encouraging the recognition and protection of the culture and history of the individuals residing, on the date of the enactment of this Act, in such unit and areas in the vicinity of such unit, and (B) providing and encouraging employment of such individuals.

(6) A plan for acquiring land with respect to such unit, including proposed modifications in the boundaries of such unit.

(7) A description (A) of privately owned areas, if any, which are within such unit, (B) of activities carried out in, or proposed for, such areas, (C) of the present and potential effects of such activities on such unit, (D) of the purposes for which such areas are used, and (E) of methods (such as cooperative agreements and issuance or enforcement of regulations) of controlling the use of such activities to carry out the policies of this Act and the purposes for which such unit is established or expanded.

(8) A plan indicating the relationship between the management of such unit and activities being carried out in, or proposed for, surrounding areas and also indicating cooperative agreements which could and should be entered into for the purpose of improving such management.

(c) **CONSIDERATION OF FACTORS.**—In developing, preparing, and revising a plan under this section the Secretary shall take into consideration at least the following factors:

(1) The specific purposes for which the concerned conservation system unit was established or expanded.

(2) Protection and preservation of the ecological, environmental, wildlife, cultural, historical, archeological, geological, recreational, wilderness, and scenic character of the concerned unit and of areas in the vicinity of such unit.

(3) Providing opportunities for Alaska Natives residing in the concerned unit and areas adjacent to such unit to continue performing in such unit activities which they have traditionally or historically performed in such unit.

(4) Activities being carried out in areas adjacent to, or surrounded by, the concerned unit.

(d) **HEARING AND PARTICIPATION.**—In developing, preparing, and revising a plan under this section the Secretary shall hold at least one public hearing in the vicinity of the concerned conservation unit, hold at least one public hearing in a metropolitan area of Alaska, and, to the extent practicable, permit the following persons to participate in the development, preparation, and revision of such plan:

(1) The Alaska Land Use Council and officials of Federal agencies whose activities will be significantly affected by implementation of such plan.

(2) Officials of the State and of political subdivisions of the State whose activities will be significantly affected by implementation of such plan.

(3) Officials of Native Corporations which will be significantly affected by implementation of such plan.

(4) Concerned local, State, and National organizations and interested individuals.

SEC. 1302. (a) **GENERAL AUTHORITY.**—Except as provided in subsections (b) and (c) of this section, the Secretary is authorized, consistent with other applicable law in order to carry out the purposes of this Act, to acquire by purchase, donation, exchange, or otherwise any lands within the boundaries of any conservation system unit other than National Forest Wilderness.

(b) **RESTRICTIONS.**—Lands located within the boundaries of a conservation system unit which are owned by—

(A) the State or a political subdivision of the State;

(B) a Native Corporation or Native Group which has Natives as a majority of its stockholders;

(C) the actual occupant of a tract, title to the surface estate of which was on, before, or after the date of enactment of this Act conveyed to such occupant pursuant to subsections 14(c)(1) and 14(h)(5) of the Alaska Native Claims Settlement Act, unless the Secretary determines that the tract is no longer occupied for the purpose described in subsections 14(c)(1) or 14(h)(5) for which the tract was conveyed and that activities on the tract are or will be detrimental to the purposes of the unit in which the tract is located; or

(D) a spouse or lineal descendant of the actual occupant of a tract described in subparagraph (C), unless the Secretary determines that activities on the tract are or will be detrimental to the purposes of the unit in which the tract is located—

may not be acquired by the Secretary without the consent of the owner.

(c) **EXCHANGES.**—Lands located within the boundaries of a conservation system unit (other than National Forest Wilderness) which are owned by persons or entities other than those described in subsection (b) of this section shall not be acquired by the Secretary without the consent of the owner unless prior to final judgment on the value of the acquired land, the owner, after being offered appropriate land of similar characteristics and like value (if such land is available from public lands located outside the boundaries of any conservation system unit), chooses not to accept the exchange. In identifying public lands for exchange pursuant to this subsection, the Secretary shall consult with the Alaska Land Use Council.

(d) **IMPROVED PROPERTY.**—No improved property shall be acquired under subsection (a) without the consent of the owner unless the Secretary first determines that such acquisition is necessary to the fulfillment of the purposes of this Act or to the fulfillment of the purposes for which the concerned conservation system unit was established or expanded.

(e) **RETAINED RIGHTS.**—The owner of an improved property on the date of its acquisition, as a condition of such acquisition, may retain for himself, his heirs and assigns, a right of use and occupancy of the improved property for noncommercial residential or recreational purposes, as the case may be, for a definite term of not more than twenty-five years, or in lieu thereof, for a term ending at the death of the owner or the death of his spouse, whichever is later. The owner shall elect the term to be reserved. Unless the property is wholly or partially donated, the Secretary shall pay to the owner the fair market value of the owner's interest in the property on the date of its acquisition, less the fair market value on that date of the right retained by the owner. A right retained by the owner pursuant to this section shall be subject to termination by the Secretary upon his

determination that such right is being exercised in a manner inconsistent with the purposes of this Act, and it shall terminate by operation of law upon notification by the Secretary to the holder of the right of such determination and tendering to him the amount equal to the fair market value of that portion which remains unexpired.

(f) **DEFINITION.**—For the purposes of this section, the term “improved property” means—

(1) a detached single family dwelling, the construction of which was begun before January 1, 1980 (hereinafter referred to as the “dwelling”), together with the land on which the dwelling is situated to the extent that such land—

(A) is in the same ownership as the dwelling or is Federal land on which entry was legal and proper, and

(B) is designated by the Secretary to be necessary for the enjoyment of the dwelling for the sole purpose of noncommercial residential use, together with any structures necessary to the dwelling which are situated on the land so designated, or

(2) property developed for noncommercial recreational uses, together with any structures accessory thereto which were so used on or before January 1, 1980, to the extent that entry onto such property was legal and proper.

In determining when and to what extent a property is to be considered an “improved property”, the Secretary shall take into consideration the manner of use of such buildings and lands prior to January 1, 1980, and shall designate such lands as are reasonably necessary for the continued enjoyment of the property in the same manner and to the same extent as existed before such date.

(g) **CONSIDERATION OF HARDSHIP.**—The Secretary shall give prompt and careful consideration to any offer made by the owner of any property within a conservation system unit to sell such property, if such owner notifies the Secretary that the continued ownership is causing, or would result in, undue hardship.

(h) **EXCHANGE AUTHORITY.**—Notwithstanding any other provision of law, in acquiring lands for the purposes of this Act, the Secretary is authorized to exchange lands (including lands within conservation system units and within the National Forest System) or interests therein (including Native selection rights) with the corporations organized by the Native Groups, Village Corporations, Regional Corporations, and the Urban Corporations, and other municipalities and corporations or individuals, the State (acting free of the restrictions of section 6(i) of the Alaska Statehood Act), or any Federal agency. Exchanges shall be on the basis of equal value, and either party to the exchange may pay or accept cash in order to equalize the value of the property exchanged, except that if the parties agree to an exchange and the Secretary determines it is in the public interest, such exchanges may be made for other than equal value.

(i)(1) The Secretary is authorized to acquire by donation or exchange, lands (A) which are contiguous to any conservation system unit established or expanded by this Act, and (B) which are owned or validly selected by the State of Alaska.

(2) Any such lands so acquired shall become a part of such conservation system unit.

APPENDIX D

(copy)

MASTER MEMORANDUM OF UNDERSTANDING
BETWEEN
THE ALASKA DEPARTMENT OF FISH AND GAME
JUNEAU, ALASKA
AND
THE U.S. NATIONAL PARK SERVICE
DEPARTMENT OF THE INTERIOR
ANCHORAGE, ALASKA

This Master Memorandum of Understanding between the State of Alaska, Department of Fish and Game, hereinafter referred to as the Department, and the U.S. Department of the Interior, National Park Service, hereinafter referred to as the Service, reflects the general policy guidelines within which the two agencies agree to operate.

WHEREAS, the Department, under the Constitution, laws, and regulations of the State of Alaska, is responsible for the management, protection, maintenance, enhancement, rehabilitation, and extension of the fish and wildlife resources of the State on the sustained yield principle, subject to preferences among beneficial uses; and

WHEREAS, the Service, by authority of the Constitution, laws of Congress, executive orders, and regulations of the U.S. Department of the Interior is responsible for the management of Service lands in Alaska and the conservation of resources on these lands, including conservation of healthy populations of fish and wildlife within National Preserves and natural and healthy populations within National Parks and Monuments; and

WHEREAS, the Department and the Service share a mutual concern for fish and wildlife resources and their habitats and desire to develop and maintain a cooperative relationship which will be in the best interests of both parties, the fish and wildlife resources and their habitats, and produce the greatest public benefit; and

WHEREAS, the Alaska National Interest Lands Conservation Act (ANILCA) and subsequent implementing Federal regulations recognize that the resources and uses of Service lands in Alaska are substantially different than those of similar lands in other states and mandate continued subsistence uses in designated National Parks plus sport hunting and fishing, subsistence, and trapping uses in National Preserves under applicable State and Federal laws and regulations; and

WHEREAS, the Department and the Service recognize the increasing need to coordinate resource planning and policy development;

NOW, THEREFORE, the parties hereto do hereby agree as follows:

(copy)

THE DEPARTMENT OF FISH AND GAME AGREES:

1. To recognize the Service's responsibility to conserve fish and wildlife and their habitat and regulate human use on Service lands in Alaska, in accordance with the National Park Service Organic Act, ANILCA, and other applicable laws.
2. To manage fish and resident wildlife populations in their natural species diversity on Service lands, recognizing that nonconsumptive use and appreciation by the visiting public is a primary consideration.
3. To consult with the Regional Director or his representative in a timely manner and comply with applicable Federal laws and regulations before embarking on management activities on Service lands.
4. To act as the primary agency responsible for management of subsistence uses of fish and wildlife on State and Service lands, pursuant to applicable State and Federal laws.
5. To recognize that National Park areas were established, in part, to "assure continuation of the natural process of biological succession" and "to maintain the environmental integrity of the natural features found in them."

THE NATIONAL PARK SERVICE AGREES:

1. To recognize the Department as the agency with the primary responsibility to manage fish and resident wildlife within the State of Alaska.
2. To recognize the right of the Department to enter onto Service lands after timely notification to conduct routine management activities which do not involve construction, disturbance to the land, or alterations of ecosystems.
3. To manage the fish and wildlife habitat on Service lands so as to ensure conservation of fish and wildlife populations and their habitats in their natural diversity.
4. To cooperate with the Department in planning for management activities on Service lands which require permits, environmental assessments, compatibility assessments, or similar regulatory documents by responding to the Department in a timely manner.
5. To consider carefully the impact on the State of Alaska of proposed treaties or international agreements relating to fish and wildlife resources which could diminish the jurisdictional authority of the State, and to consult freely with the State when such treaties or agreements have a significant impact on the State.

(copy)

6. To review Service policies in consultation with the Department to determine if modified or special policies are needed for Alaska.
7. To adopt Park and Preserve management plans whose provisions are in substantial agreement with the Department's fish and wildlife management plans, unless such plans are determined formally to be incompatible with the purposes for which the respective Parks and Preserves were established.
8. To utilize the State's regulatory process to the maximum extent allowed by Federal law in developing new or modifying existing Federal regulations or proposing changes in existing State regulations governing or affecting the taking of fish and wildlife on Service lands in Alaska.
9. To recognize the Department as the primary agency responsible for policy development and management direction relating to subsistence uses of fish and wildlife resources on State and Service lands, pursuant to applicable State and Federal laws.
10. To consult and cooperate with the Department in the design and conduct of Service research or management studies pertaining to fish and wildlife.
11. To consult with the Department prior to entering into any cooperative land management agreements.
12. To allow under special use permit the erection and maintenance of facilities or structures needed to further fish and wildlife management activities of the Department on Service lands, provided their intended use is not in conflict with the purposes for which affected Parks or Preserves were established.

THE DEPARTMENT OF FISH AND GAME AND THE NATIONAL PARK SERVICE MUTUALLY AGREE:

1. To coordinate planning for management of fish and wildlife resources on Service lands so that conflicts arising from differing legal mandates, objectives, and policies either do not arise or are minimized.
2. To consult with each other when developing policy, legislation, and regulations which affect the attainment of wildlife resource management goals and objectives of the other agency.
3. To provide to each other upon request fish and wildlife data, information, and recommendations for consideration in the formulation of policies, plans, and management programs regarding fish and wildlife resources on Service lands.

(copy)

4. To recognize that the taking of fish and wildlife by hunting, trapping, or fishing on certain Service lands in Alaska is authorized in accordance with applicable State and Federal law unless State regulations are found to be incompatible with documented Park or Preserve goals, objectives or management plans.
5. To recognize for maintenance, rehabilitation, and enhancement purposes, that under extraordinary circumstances the manipulation of habitat or animal populations may be an important tool of fish and wildlife management to be used cooperatively on Service lands and waters in Alaska by the Service or the Department when judged by the Service, on a case by case basis, to be consistent with applicable law and Park Service policy.
6. That implementation by the Secretary of the Interior of subsistence program recommendations developed by Park and Park Monument Subsistence Resource Commissions pursuant to ANILCA Section 808(b) will take into account existing State regulations and will use the State's regulatory process as the primary means of developing Park subsistence use regulations.
7. To neither make nor sanction any introduction or transplant of any fish or wildlife species on Service lands without first consulting with the other party and complying with applicable Federal and State laws and regulations.
8. To cooperate in the development of fire management plans which may include establishment of priorities for the control of wildfires and use of prescribed fires.
9. To consult on studies for additional wilderness designations and in development of regulations for management of wilderness areas on Service lands.
10. To resolve, at field office levels, all disagreements pertaining to the cooperative work of the two agencies which arise in the field and to refer all matters of disagreement that cannot be resolved at equivalent field levels to the Regional Director and to the Commissioner for resolution before either agency expresses its position in public.
11. To meet annually to discuss matters relating to the management of fish and wildlife resources on, or affected by, Service lands.
12. To develop such supplemental memoranda of understanding between the Commissioner and the Regional Director as may be required to implement the policies contained herein.
13. That the Master Memorandum of Understanding is subject to the availability of appropriated State and Federal funds.

(copy)

14. That this Master Memorandum of Understanding establishes procedural guidelines by which the parties shall cooperate, but does not create legally enforceable obligations or rights.
15. That this Master Memorandum of Understanding shall become effective when signed by the Commissioner of the Alaska Department of Fish and Game and the Alaska Regional Director of the National Park Service and shall continue in force until terminated by either party by providing notice in writing 120 days in advance of the intended date of termination.
16. That amendments to this Master Memorandum of Understanding may be proposed by either party and shall become effective upon approval by both parties.

STATE OF ALASKA

U.S. DEPARTMENT OF THE INTERIOR

Department of Fish and Game

National Park Service

By /s/ Ronald O. Skoog

By /s/ John E. Cook

Ronald O. Skoog

John E. Cook

Commissioner

Regional Director, Alaska

Date 14 October 1982

Date October 5, 1982

APPENDIX E: DEVELOPMENT COST ESTIMATES

ALTERNATIVE A (No Action)

No additional development costs

ALTERNATIVE B (Proposed Plan)

Brooks Camp

Relocate campground	
30 campsites	\$ 39,300
water system	39,300
3 shelters	19,650
pit toilets	5,240
food cache	1,310
	<u>\$ 104,800</u>

Relocate administrative and visitor use facilities

Construct ranger office	131,000
Construct maintenance building	262,000
Construct utility systems	1,310,000
Construct visitor use facility	458,500
Relocate 7 guest cabins	65,500
Relocate one 8-unit Skytel	65,500
Relocate lodge, kitchen, dining area	78,600
Relocate maintenance shop/warehouse	52,400
Relocate store/office	19,650
Relocate 12 employee cabins (concession)	78,600
Relocate manager's cabin	9,170
Relocate 9 employee quarters (NPS)	91,700
Relocate fish-cleaning building	13,100
Relocate generator building	19,650
Relocate warehouse	32,750
Improve road to new site (2-3 miles)	131,000
Construct parking areas	26,200
	<u>\$2,845,320</u>

Grosvenor Camp

Construct campground	
5 campsites	\$ 15,720
pit toilet	2,620
food cache	1,310
guest cabin (400 sq ft)	41,920
ranger station (700 sq ft)	82,530
	<u>\$ 144,100</u>

Note: Costs include allowance for contingencies, supervision, and cultural resource compliance. Estimates are based on costs for fiscal year 1986.

Bay of Islands

Construct staging area and primitive campsite	
outside boat storage	\$ 6,550
food cache	1,310
pit toilet	2,620
primitive shelter	39,300
ranger station (700 sq ft)	82,530
	<u>\$ 132,310</u>

Nonvianuk Lake

Designate camping area	
food cache	\$ 1,310
pit toilet	2,620
	<u>\$ 3,930</u>

Yori Pass access point

Construct campground	
5 campsites	\$ 15,720
food cache	1,310
pit toilet	2,620
	<u>\$ 19,650</u>

Lake Camp

Provide additional facilities	
interpretive 2-mile nature trail	\$ 39,300
dock improvement	3,930
exhibits	6,550
3 picnic shelters	117,900
	<u>\$ 167,680</u>

Coastal District

Construct 3 ranger stations	<u>\$ 247,590</u>
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Alternative B Grand Total \$3,665,380

ALTERNATIVE C (Wilderness Adventure Cruise)Research Bay

Construct summer headquarters	
administration building (700 sq ft)	\$ 146,720
boat dock (400 sq ft)	26,200
employee housing (9 units at 700 sq ft each)	1,237,950
maintenance building (1,500 sq ft)	353,700
maintenance yard	32,750
visitor contact station (400 sq ft)	83,840
gravel road (2 miles)	1,310,000
	<u>\$3,191,160</u>

Lake Camp

Provide additional facilities

boat dock expansion	\$ 31,440
information center (1,500 sq ft)	294,750
campground (10 sites)	26,200
shuttle operation (4 vans)	104,800
	<u>\$ 457,190</u>

Brooks Camp

Return to natural conditions

\$ 98,250

Grosvenor Camp

Return to natural conditions

\$ 19,650

Bay of Islands

Construct staging area and campground

ranger station area and campground	\$ 82,530
outside boat storage	6,550
pit toilet	2,620
food cache	1,310
primitive campground (5 sites)	10,480
	<u>\$ 103,490</u>

Coastal District

Establish 3 ranger stations

\$ 247,590

Preserve

Establish 10 campsites

\$ 26,200

General

Establish concessioner-owned cruise operations

2 tour boats (40-person capacity each)	<u>\$ 700,000</u>
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Alternative C Grand Total \$4,843,530*

*Includes \$700,000 expenditure by private concessioner.

APPENDIX F: FEDERAL CONSISTENCY WITH ALASKA COASTAL ZONE MANAGEMENT POLICIES

Although federal lands are exempt from state regulations for the coastal zone, the Coastal Zone Management Act of 1976 requires that federal agencies conducting activities or undertaking development directly affecting the coastal zone shall ensure that the activities or developments are consistent with approved state management programs to the extent practicable.

The basis for the consistency determination is the Draft General Management Plan/Environmental Assessment for Katmai National Park and Preserve. The standards for consistency determination and the evaluation are cited below, followed by an analysis of the NPS preferred alternative.

COASTAL DEVELOPMENT

6AAC 80.040:

- (a) In planning for and approving development in coastal areas, districts and state agencies shall give, in the following order, priority to:
 - (1) water-dependent uses and activities;
 - (2) water-related uses and activities;
 - (3) uses and activities which are neither water-dependent nor water-related for which there is no feasible and prudent inland alternative to meet the public need for the use or activity.
- (b) The placement of structures and the discharge of dredged or fill material into coastal water must, at a minimum, comply with the standards contained in Parts 320-323, Title 33, Code of Federal Regulations.

Proposed Plan: NPS development actions would be confined to existing developed areas except for ranger camps that would be established along the coast at Geographic Harbor, Kukak Bay, and Hallo Bay. For the most part, the recommended developments would enhance recreational use of Katmai National Park and Preserve. Placement of structures and the discharge of dredged or fill material into coastal waters would not be required.

GEOPHYSICAL HAZARD AREAS

6AAC 80.050:

- (a) Districts and state agencies shall identify known geophysical hazard areas and areas of high development potential in which there is a substantial possibility that geophysical hazards may occur.

- (b) Development in areas identified under (a) of this section may not be approved by the appropriate state or local authority until siting, design, and construction measures for minimizing property damage and protecting against loss of life have been provided.

Proposed Plan: Katmai is considered an area of active volcanism, and the entire complex is subject to volcanic hazards to varying degrees. The proposed developments are generally in areas distant from the most intense volcanic hazards. Proposed development would require mitigation in design and siting to minimize hazards apparent at specific locations.

RECREATION

6AAC 80.060:

- (a) Districts shall designate areas for recreational use. Criteria for designation of areas of recreational use are:
 - (1) the area receives significant use by persons engaging in recreational pursuits or is a major tourist destination; or
 - (2) the area has potential for high quality recreational use, because of physical, biological, or cultural features.
- (b) Districts and state agencies shall give high priority to maintaining and, where appropriate, increasing public access to coastal water.

Proposed Plan: Recreational use of Katmai would continue, and the number of visitors accommodated would increase.

ENERGY FACILITIES

6AAC 80.070: Not applicable.

TRANSPORTATION AND UTILITIES

6AAC 80.080:

- (a) Transportation and utility routes in the coastal area must be sited, designed, and constructed so as to be compatible with district programs.
- (b) Transportation and utility routes and facilities must be sited inland from beaches and shorelines unless the route or facility is water-dependent or no feasible or prudent inland alternative exists to meet the public need for the route or facility.

Proposed Plan: Implementation of the preferred alternative would not require development of new transportation routes or utility corridors. The facility construction called for would typically be primitive and self-contained.

FISH AND SEAFOOD PROCESSING

6AAC 80.090:

Districts shall identify and may designate areas of the coast suitable for the location or development of facilities related to commercial fishing and seafood processing.

Proposed Plan: None of the proposed developments would be used for commercial fishing activities.

TIMBER HARVESTING AND PROCESSING

6AAC 80.100: Not applicable.

MINING AND MINERAL PROCESSING

6AAC 80.110:

- (a) Mining and mineral processing in the coastal area must be regulated, designed, and conducted so as to be compatible with the standards contained in this chapter, adjacent uses and activities, statewide and national needs, and district programs.
- (b) Sand and gravel may be extracted from coastal waters, intertidal areas, barrier islands, and spits when there is no feasible and prudent alternative to coastal extraction which will meet the public need for sand or gravel.

Proposed Plan: Mining activities in Katmai National Park and Preserve would be limited to valid existing claims. Mining operations currently require plans of operations that have been approved by the National Park Service and that are oriented to minimizing environmental impacts and mitigating these impacts when they are unavoidable.

SUBSISTENCE

6AAC 80.120:

- (a) Districts and state agencies shall recognize and assure opportunities for subsistence usage of coastal areas and resources.

- (b) Districts shall identify areas in which subsistence is the dominant use of coastal resources.
- (c) Districts may, after consultation with appropriate state agencies, Native corporations, and any other persons or groups, designate areas identified under (b) of this section as subsistence zones in which subsistence uses and activities have priority over all nonsubsistence uses and activities.
- (d) Before a potentially conflicting use or activity may be authorized within areas designated under (c) of this section, a study of the possible adverse impacts of the proposed potentially conflicting use or activity upon subsistence usage must be conducted and appropriate safeguards to assure subsistence usage must be provided.
- (e) Districts sharing migratory fish and game resources must submit compatible plans for habitat management.

Proposed Plan: Subsistence use in the preserve area is allowed under the governing legislation for Katmai. The preferred alternative would encourage sporthunting in the preserve to a small degree, but it should not conflict with subsistence uses. Sporthunting would be governed by regulations of the Alaska Department of Fish and Game.

HABITATS

6AAC 80.130:

- (a) Habitats in the coastal area which are subject to the Alaska coastal management program include:
 - (1) offshore areas;
 - (2) estuaries;
 - (3) wetlands and tideflats;
 - (4) rocky islands and seacliffs;
 - (5) barrier islands and lagoons;
 - (6) exposed high energy coasts;
 - (7) rivers, streams, and lakes; and
 - (8) important upland habitat.
- (b) The habitats contained in (a) of this section must be managed so as to maintain or enhance the biological, physical, or chemical characteristics of the habitat which contribute to its capacity to support living resources.

Proposed Plan: Natural resources and associated processes would be protected. No NPS proposal would significantly affect any of the above listed habitats. Relocation of NPS facilities to a more upland habitat type would be offset by the restoration of habitat adjacent to coastal areas.

AIR, LAND, AND WATER QUALITY

6AAC 80.140:

The statutes pertaining to and the regulations and procedures of the Alaska Department of Environmental Conservation with respect to the protection of air, land, and water are incorporated into the Alaska Coastal Management Program.

Proposed Plan: All standards of the Alaska Department of Environmental Conservation will be met. Appropriate and necessary permits and review of proposed actions are an inherent part of the NPS general management plan process.

HISTORIC, PREHISTORIC, AND ARCHEOLOGICAL RESOURCES

6AAC 80.150:

Districts and appropriate state agencies shall identify areas of the coast which are important to study, understanding, or illustration of national, state, or local history or prehistory.

Proposed Plan: Historic and prehistoric surveys have been undertaken, and identified cultural resources are being protected according to NPS policies and standards. Procedures are in effect to protect any additional resources discovered during implementation of this plan. All standards of the state coastal management program have been met or exceeded.

CONSISTENCY CONCLUSION

All phases of the Alaska coastal management program have been met, as discussed above, in the planning for this project. It is determined that this project is in conformity, to the extent practicable, with the state management program.

INTRODUCTION

Section 810(a) of ANILCA states:

In determining whether to withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands under any provision of law authorizing such actions, the head of the Federal agency having primary jurisdiction over such lands or his designee shall evaluate the effect of such use, occupancy, or disposition on subsistence uses and needs, the availability of other lands for the purposes sought to be achieved, and other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes. No such withdrawal, reservation, lease, permit, or other use, occupancy or disposition of such lands which would significantly restrict subsistence uses shall be effected until the head of such Federal agency--

(1) gives notice to the appropriate State agency and the appropriate local committees and regional councils established pursuant to section 805;

(2) gives notice of, and holds, a hearing in the vicinity of the area involved; and

(3) determines that (A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands, (B) the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.

The purposes for which the park/preserve was established and shall be managed are presented in title II of ANILCA (see also "Introduction" to the plan).

In addition, components of the national wild and scenic rivers system (that is, the Alagnak Wild River) and the national wilderness preservation system are to be administered pursuant to the Wild and Scenic Rivers Act and the Wilderness Act, respectively, as amended by ANILCA (see river management and wilderness management sections elsewhere in this document for a discussion of specific management provisions).

Subsistence uses by local residents are to be allowed in national preserves and where specifically permitted by ANILCA in national parks (ANILCA, sec. 203 and 816). ANILCA does not authorize subsistence uses within Katmai National Park, so this evaluation applies only to the preserve portion (including designated wilderness and the Alagnak Wild River), where subsistence uses are authorized. Subsistence uses within the preserve are to be permitted in accordance with title VIII of ANILCA.

EVALUATION FACTORS

Effects on subsistence uses or needs: Subsistence activities would be significantly restricted if any of the following conditions occurred:

major direct impacts on subsistence resources, adverse impacts on habitat, or increased competition from nonrural harvesters

unavailability of subsistence resources because of a change in distribution of wildlife or their migration routes

limitations on access to harvestable resources because of physical or legal barriers

Availability of other lands: Other lands that could be used for the proposed plan or alternatives were identified.

Alternatives to reduce or eliminate the use of public lands needed for subsistence purposes: Ways to reduce or eliminate the use of public lands needed for subsistence activities were analyzed.

ALTERNATIVES CONSIDERED

The National Park Service is proposing to implement a general management plan for Katmai National Park and Preserve that would guide management of the area for the next five to 10 years. The plan proposes strategies for the management of natural resources, cultural resources, visitor use and development, for land protection, and for administration. The alternatives considered by the "Environmental Assessment" include:

alternative A--continuation of existing condition (no action)

alternative B--diversified opportunities (the proposed plan)

alternative C--a wilderness adventure cruise

AFFECTED ENVIRONMENT

The preserve is part of a much broader subsistence use area used by local residents. Users come mainly from the villages of Kokhonak, Levelock, and Igiugig. Subsistence activities within the preserve are influenced by the presence of the Alagnak River and Nonvianuk and Kukaklek lakes.

EVALUATION OF ALTERNATIVES

Effects on Subsistence Activities

The Potential to Reduce Populations, Adversely Affect Habitat, or Increase Competition from Nonrural Harvesters. No significant declines in populations or adverse impacts to habitat would result from

implementation of any of the alternatives. Natural cycles in populations would continue. Habitat manipulation or control of other species would not be undertaken for the purpose of maintaining subsistence uses within the preserve.

Alternative B (the proposed plan) would have the greatest potential for increasing competition from nonrural harvesters because visitor opportunities would be diversified, including opportunities within the preserve. Even so, use of the preserve is not expected to increase significantly because of the remoteness of the area and the cost of getting there. Only minor increases in recreational use of the preserve would be expected over the next five to 10 years under this alternative. Under alternative A or C, recreational use of the preserve would remain essentially the same as present conditions.

Conclusion: None of the alternatives would result in a reduction in the population of any harvestable resource, an adverse effect on habitat, or a significant increase in competition from nonrural harvesters.

Availability of Subsistence Resources. The distribution, migration patterns, and location of subsistence resources are expected to remain essentially the same under any of the alternatives.

Conclusion: None of the alternatives would result in significant changes in the availability of resources caused by an alteration in their distribution, migration, or location.

Restriction of Access. Under all alternatives, access to the preserve for subsistence purposes is guaranteed by section 811 of ANILCA. Regulations implementing this section are already in place, and none of the alternatives would propose changes in those regulations.

Conclusion: None of the alternatives would result in limitations on access by subsistence users to harvestable resources.

Availability of Other Lands for the Proposed Action

There are no other lands available for this action because the preserve boundaries were established by Congress to achieve specific purposes. There are, however, lands outside the preserve which are available for subsistence users. The proposed plan is consistent with the mandates of ANILCA, including title VIII and the National Park Service organic act.

Other Alternatives to Reduce or Eliminate Use of Public Lands Needed for Subsistence Purposes

No alternatives that would reduce or eliminate the use of public lands needed for subsistence purposes were identified because preparation of a general management plan is required by ANILCA, and the proposed plan is consistent with provisions of ANILCA related to subsistence. In addition, subsistence users utilize other lands outside the preserve, especially those lands that are most easily accessible and that can provide

for their needs. Subsistence users extend their activities to other areas on an "as needed" basis.

CONSULTATION AND COORDINATION

The Alaska Department of Fish and Game, affected governmental agencies, native organizations, and the general public were consulted throughout preparation of the proposed plan (see the "Consultation and Coordination" section of the "Environmental Assessment").

FINDINGS

Based upon the above process and considering all the available information, this evaluation concludes that the proposed plan would not result in significant restrictions of subsistence uses within Katmai National Preserve.

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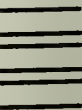
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